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Are Business Taxes Higher in Michigan Than in Other Great Lakes States?

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I. Introduction

It is common knowledge that Michigan's economic performance in the past few years has been well below the national average. In such an environment it is not surprising that some commentators have identified state and local business tax costs as the major culprit in explaining the state's plight. But, in spite of the existence of a large number of business tax cost comparisons, there is remarkably little agreement about the actual burden of state and local business taxes on firms in Michigan or across the Great Lakes region. Early in 1984 the Upjohn Institute was asked by Doug Ross, then Director of the Task Force for a Long-Term Economic Strategy for Michigan and now the Director of the Michigan Department of Commerce, to objectively analyze business tax costs in Michigan relative to its neighboring states.[1]

II. Approach

The purpose of the study is to assess Michigan's business tax costs relative to those in the other Great Lakes states. The Great Lakes States are defined as Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. Total state and local business tax costs are defined as including workers' compensation, unemployment insurance, gross receipts, corporate income, franchise, value added, property, and sales taxes.[2] We used the most current or near-term provisions of the tax codes through about mid-1984 and scheduled to take effect not later than January 1, 1985. The eight taxes considered in this study constitute virtually all of the state and local tax burdens for most business firms. We also estimated the effect on the tax burdens across the states of deducting state and local taxes from income on federal tax returns and for the effects of property tax abatements that may be granted locally to spur business expansion.

The basic methodology utilized in the study is to construct the financial statements for eight hypothetical firms varying in size and other relevant operating characteristics. The state and local tax costs are then estimated for each firm as if it were located in each of the six states.[3] This procedure assumes that all nontax costs are identical for each firm, regardless of the state in which it is located, thereby isolating the variation in state and local tax costs due to differences in tax rates and tax structures. Summary descriptions of the characteristics of the eight prototypical firms are presented in Table 1. They are all manufacturing firms except for the business services firm (No. 6), which is most likely a supplier to manufacturing firms. Although the firms considered in this study are hypothetical, the utilization of actual industry averages[4] in constructing the detailed characteristics of these firms insures that they are representative of firms in their industries.[5]

III. Findings

This section focuses on the results of the study. The individual state and local taxes are examined first. Table 2 shows the total liability by firm for each tax in Michigan relative to the Great Lakes average for that tax (Great Lakes average = 100). Since these state and local tax costs are deductible from income on federal tax returns, as much as 46 percent of state and local costs are effectively transferred to the federal tax base. In other words, for every dollar that state and local taxes are higher in one state than another, the federal tax bill falls by as much as 46 cents.

The effects of the federal tax deductibility of state and local taxes are shown in two ways. First, the combined total of federal, state and local taxes is presented in the last row of Table 2 to give a true picture of the differences among the states in the total tax costs to the

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Michigan Economic Indicators

Item	Year previous of latest month	Previous month	Latest month
Manufacturing workers			
Average weekly hours, Michigan	43.1	42.7	43.5 (Sept.)
Average weekly hours, U.S.	40.7	40.3	40.8 (Sept.)
Average hourly earnings, Michigan ($)	12.22	12.56	12.79 (Sept.)
Average hourly earnings, U.S. ($)	9.24	9.48	9.54 (Sept.)
U.S. motor vehicle production (units)	785,081	844,854	924,982 (Sept.)
Electricity usage (mil. kwh.)			
Michigan	5,852	5,902	5,940 (June)
United States	189,160	177,596	189,196 (June)
Raw steel production			
Michigan (000 net tons)	524	627	614 (Sept.)
United States (000 net tons)	6,378	7,130	6,924 (Sept.)
Consumer price index (1967 = 100)			
Detroit area	311.6	318.0	320.5 (Sept.)
United States	314.5	323.5	324.5 (Sept.)
U.S. producer price index (1967 = 100)	309.5	307.2	305.8 (Sept.)
Michigan farm prices received index (1977 = 100)	130	111	109 (Sept.)

SOURCE: U.S. Bureau of the Census; U.S. Bureau of Labor Statistics; Michigan Crop Reporting Service; Ward's Automotive Reports; American Iron and Steel Institute; and Energy Information Administration.

Permit Authorized Construction in Selected Counties, First 9 Months 1984 and 1985

(In thousands of dollars)

	Residential		Industrial		Office		Mercantile	
	1984	1985	1984	1985	1984	1985	1984	1985
Allegan	8,569	1,657	17	380	296	0	194	457
Antrim	7,704	5,311	0	17	0	907	0	17
Berrien	6,249	2,220	535	928	922	0	1,025	469
Clinton	8,673	7,981	23	418	0	71	562	363
Emmet	5,151	5,589	1,111	0	0	160	68	0
Genesee	22,451	36,685	9,615	25,890	4,748	9,999	11,356	10,004
Grand Traverse	17,385	12,717	1,734	1,500	1,366	1,029	1,347	1,544
Ingham	33,192	38,114	1,703	755	9,488	11,247	4,788	7,424
Jackson	4,891	3,619	314	601	62	1,190	631	815
Kalamazoo	22,906	27,095	4,194	2,313	1,939	7,778	958	1,811
Kent	85,550	93,029	15,826	45,049	8,555	17,167	10,478	7,402
Livingston	16,459	27,911	3,612	17,235	255	709	1,416	1,431
Macomb	99,036	167,982	20,384	47,068	3,569	10,748	12,318	29,867
Midland	13,623	8,148	378	44	3,469	975	308	216
Muskegon	11,230	6,419	1,762	930	665	403	2,224	1,837
Oakland	241,481	450,871	67,664	87,142	111,139	193,916	24,288	30,428
Ottawa	32,884	51,518	13,834	9,908	1,308	3,411	3,919	1,989
Saginaw	5,624	2,710	526	63	721	1,153	1,034	3,559
St. Clair	8,987	12,612	1,147	4,167	1,710	717	618	676
Washtenaw	30,338	50,894	9,208	3,445	7,461	14,198	598	4,767
Wayne	111,314	149,838	26,412	144,189	38,160	34,528	18,602	50,571
MICHIGAN	974,146	1,330,522	206,413	404,457	226,255	319,248	111,332	174,570

SOURCE: Bureau of the Census, special release.

Table 1. Summary of Descriptions of the Prototypical Firms

Firm	SIC Code	Industry	Description
1	26	Paper	Large firm, average profits
2	28	Chemicals	Large firm, highly profitable, multistate operations, most capital intensive of the three large firms, lower than average unemployment
3	37	Autos	Large firm, large losses, higher than average unemployment
4	38	Instruments	Small firm, average profits but industry average profits low, highly labor intensive
5	35	Nonelectrical machinery	Small firm, large losses, capital intensive
6	73	Business services	Small firm, small losses
7	36	Electronics	Medium firm, average profits
8	20	Food processing	Medium firm with large seasonal work force

Table 2. Individual State and Local Business Tax Costs in Michigan Relative to the Great Lakes Average for Each Tax

Tax	Firm							
	1	2	3	4	5	6	7	8
Payroll	119	125	120	110	108	99	139	134
Workers' compensation	132	137	124	153	128	129	210	167
Unemployment insurance	96	104	115	96	96	97	96	116
Nonpayroll	108	89	131	82	88	103	116	108
Single Business	115	78	299	57	37	136	137	110
Property with abatements	127	122	113	111	106	113	108	130
Sales	23	32	34	55	58	70	41	47
Total state and local	113	99	124	101	98	101	127	121
Total federal, state and local	104	100	124	101	98	101	110	108

NOTE: The index numbers in this table reflect the extent to which the specific tax for each firm is higher or lower than the Great Lakes average for that tax and firm. For example, the first entry for Firm 1 indicates that payroll taxes are 19 percent higher for this firm in Michigan than the Great Lakes average for payroll taxes for that firm.

firm. This is important because the deduction of state and local taxes from the federal income tax greatly diminishes the variability in total tax costs. Second, the total state and local tax costs net of the federal tax deductions are related to the sales of each firm in Table 3 in order to assess directly the relative magnitude of the actual burden of state and local tax costs. The differences between any two states in the percents shown in Table 3 times the sales of that firm indicate the net tax savings or loss that would be incurred by a firm moving from one of the states to the other (or selecting a location in one state over the other).

Payroll Taxes

One finding of this study is that the payroll taxes for workers' compensation[6] and unemployment insurance amount to about one-half of the total state and local tax costs for the prototypical manufacturing firms. Payroll taxes are usually 1 percent of sales, although they can be much higher than that in some cases. Given their importance, it is surprising that so many other studies have ignored these taxes, presumably because they were regarded either as unimportant or too difficult to measure.

Payroll taxes in Michigan are above the regional average. The bulk of this differential for the prototypical firms is due to higher costs for workers' compensation. Although costs have fallen dramatically since the Michigan legislature enacted major reforms in the workers' compensation system in 1980 and 1981, including the adoption of open competition in the market for workers' compensation, Michigan remains about 30 percent higher than the regional average for those costs.[7] Still, Michigan has narrowed the gap in recent years, and the current trends are encouraging in that the number of claims have fallen dramatically.

Table 3. Total State and Local Tax Costs Net of Federal Tax Deductions as a Percent of Sales

Firm	Illinois	Indiana	Michigan	Minnesota	Ohio	Wisconsin
1	1.12	0.90	1.43	1.79	1.46	0.95
2	0.91	0.80	0.94	1.33	0.93	0.75
3	1.54	1.33	2.57	2.76	2.65	1.63
4	1.73	1.41	2.00	2.72	1.98	2.01
5	1.32	1.48	1.70	2.35	2.09	1.45
6	1.55	1.56	1.87	2.34	1.82	1.97
7	0.93	0.86	1.52	1.76	1.19	0.93
8	0.68	0.59	0.98	1.14	0.72	0.72

NOTE: The assumed sales in millions for each of the firms were respectively: No. 1, $300; No. 2, $300; No. 3, $300; No. 4, $2.5; No. 5, $3.0; No. 6, $2.5; No. 7, $20; and No. 8, $30.

We think it is very difficult to fairly assess a workers' compensation system that is undergoing such a significant transition, both in the statutes that govern the system and in the marketplace where coverage is bought and sold. It will be at least a few more years before the total impact of these changes is known and perhaps even longer before the reforms have been subjected to litigation and review by the courts. In fact, the Michigan legislature must still settle the question of the definition of disability because the new definition adopted in 1981 included a sunset provision effective December 31, 1984 (which was subsequently extended to June 30, 1985). Thus, it is entirely possible that policymakers will choose to adopt another new definition of disability in 1985 even before the impacts of the 1982 definition are truly known.

In sharp contrast to workers' compensation, unemployment insurance (UI) costs have risen dramatically in the last few years throughout the Great Lakes region due to the length and severity of the recent recession. For the prototypical firms with unemployment records at the Great Lakes average, the costs of UI in five of the six states are within 20 percent of each other. For these comparisons, Michigan tends to have the lowest unemployment insurance costs in the region outside Indiana. On the other hand, Michigan has some of the highest UI costs for firms with *bad* unemployment records. That is the result of a number of legislative changes in the state UI system in 1982 which acted to increase the importance of experience rating in the Michigan UI system.[8] The net result is that the state may now have one of the most, if not the most, steeply experience rated tax structures for UI in the nation.

Apparently the philosophy adopted by the Michigan legislature is that those firms who "cause" an unemployment problem should pay for the costs of solving that problem. Among other provisions, positive balance employers in the state (generally firms with lower than average unemployment records) are absolved from paying an added tax to finance the interest charges on the state's federal UI debt; instead, these charges are borne entirely by negative balance employers (generally those firms with higher than average unemployment records).[9] It is also interesting to note that new firms in Michigan are given a credit on the single business tax for any federal penalty charges paid because of the state's UI debt, and the state shares the lowest UI tax rate for new firms with one other state in the region.

Regardless of the findings of this study that Michigan employers with average or better than average unemployment records for the region do not pay higher UI rates than similarly situated firms in the other Great Lakes states, employers' perception of UI costs in Michigan will likely remain negative because absolute costs have been rising significantly in recent years. Since UI rates tend to lag the actual unemployment experience of a firm or state, these increases may continue for a few more years. It is also true that firms with bad unemployment records or industries where employment tends to be highly seasonal may find UI rates to be sharply higher when the full effect of the 1982 reforms are felt by about 1985. For these reasons, it would not be surprising if UI costs remain a public policy issue for at least the next few years.

Nonpayroll Taxes

Michigan is more favorably situated in regard to nonpayroll taxes than payroll taxes. Although there is considerable variation in the estimates for the prototypical firms, it is not stretching the comparisons too far to say that nonpayroll taxes in Michigan approach the regional average. In the specific case of the business portion of sales taxes, the state is easily the lowest cost state in the region. But the sales tax also tends to be the least important of the business taxes, so it has relatively little effect on overall tax costs. In contrast, Michigan has above average costs for property taxes, usually one of the most important of the individual business taxes. Even with property tax abatements, property tax costs for the prototypical firms in Michigan tend to be from 6 to 30 percent above the regional average. Although the margin of error is probably the greatest for property taxes, it remains likely that Michigan's property tax costs are higher than the regional average.

It appears that property tax abatements may present a significant dilemma for policymakers in Michigan. Economists and others have doubted for many years the efficacy of property tax abatements to spur new investment, and there appears to be growing concern about the erosion of the property tax base (which is used primarily to support education) due to the widespread use of these abatements by local jurisdictions. Without property tax abatements, however, the prototypical firms in Michigan have the highest property taxes in the region. Even with abatements, Michigan's position does not improve as much as one might expect because three other Great Lakes states (Illinois, Indiana, and Ohio) also have similar abatement programs. Since Michigan's property tax costs may be above the regional average, it will be extremely difficult for policymakers to suggest elimination of this tax incentive, especially given the intense interstate tax competition that dominates the region.

Turning our attention to the Michigan Single Business Tax (SBT), the surprise is that it does not seem to be as burdensome a tax as one might think, despite the attention devoted to the SBT in the media. In absolute terms, the SBT can be less than the costs for workers' compensation, unemployment insurance, or property taxes. For many firms experiencing average or above average profits, the Michigan SBT probably imposes no higher burdens than the profits taxes of other states. In fact, the SBT costs of smaller firms in Michigan (less than $6 million of sales) can be some of the lowest in the region when compared to similar taxes of other states. This lower tax is due to a variety of special provisions in the SBT that favor small firms, especially the small business credit which was significantly expanded in 1984. We think it is difficult to defend the notion that the Michigan SBT retards firm start-ups.

Outside of workers' compensation, Michigan's greatest departure from the regional average arises in the SBT costs of firms *with losses* which do not qualify for the small business credit. The SBT burden of the proto-

typical firm with these characteristics (Firm No. 3) appears modest in absolute terms, about one-third of 1 percent of sales. Even so, it is easily the highest in the region. This result is due to the broad tax base of the SBT as compared to the narrow tax base of the profits taxes in other states. Specifically, the SBT is a value added tax in which wages, on average, make up about two-thirds of the tax base. So a significant tax liability may remain with no profits.

Total State and Local Tax Costs

When total state and local tax costs are viewed without regard to the federal tax structure, Michigan (see next to last row of Table 2) ranges from just below the regional average to about 25 percent above the regional average. As explained earlier, however, the effect of federal deductibility of state and local taxes is to reduce the range or differential between the states on the total federal, state and local tax burdens. From this perspective, seven of the eight prototypical firms in Michigan range from just below the regional average to about 10 percent above the regional average. The lone exception occurs for a large firm with large losses which, of course, gains nothing currently from the federal deductibility of state and local taxes. The tax burdens of the three smaller firms in this study are all virtually identical to the regional average.

Thus, Michigan's business tax costs are most unlike the other Great Lakes states for larger firms which are currently experiencing economic hardships—probably cyclically sensitive firms. Although it is far beyond the scope of this study to assess the fairness of taxing firms with losses, it can be said that: (1) the Michigan legislature deliberately adopted a tax, the SBT, that would help it to stabilize revenues in good times and bad times; and (2) the state also adopted a steeply experience rated unemployment insurance system. Although both of these policy decisions have undoubtedly imposed higher than average state and local taxes on these firms in some years, tax revenues from the SBT have been stable. Furthermore, at least partly as a result of the 1982 unemployment insurance reforms, Michigan will eliminate the interest-bearing portion of its unemployment insurance debt in 1985. It should also be pointed out that the state and local tax costs of such cyclically sensitive firms in Michigan would undoubtedly be much closer to the regional average if they were calculated over the entire course of the business cycle.[10]

IV. Conclusions

In sum, Michigan's state and local business tax costs for the prototypical firms are average to above average relative to the other Great Lakes states but not wildly out of line with any of its neighbors. State and local tax costs net of federal tax deductions generally ranged from about 1 to 2 percent of sales (Table 3). Except for Firm No. 3, the potential tax savings for a firm leaving Michigan and going to any of the other Great Lakes states is roughly one-half of 1 percent of sales or less, frequently much less. Somewhat surprisingly, we found the payroll taxes for workers' compensation and unemployment insurance to be as high as one-half of the total state and local tax costs. Michigan's business tax costs are above the regional average for workers' compensation and property taxes and significantly below the regional average for the business portion of sales taxes.

There is no doubt that the statutes which govern state and local taxes tend to be very complex, giving rise to the possibility of a wide range of comparative results across firms and states. This complexity may be one reason why the findings of so many of the existing tax studies appear to conflict with one another. We are also convinced that these laws are so complex that failure to take them into account likely results in serious error. It appears that there are no simple approaches in studying business taxes at either the firm or aggregate level of analysis. Thus we suggest extreme caution in interpreting this study as well as other tax studies.

This study, of course, has its limitations. Most important is that we do not examine the potentially significant benefits derived from government spending. The danger is that the unwary will presume that lower business taxes necessarily means more jobs; that is tantamount to assuming that taxes are a cost of doing business for which firms receive absolutely no benefit. Obviously the development of infrastructure such as roads, communications, public health facilities, etc., provides the essential framework within which commerce and manufacturing can take place, while education helps to provide the work force with employable skills. None of the benefits of government spending are examined in this study. In addition, the study ignores the implications of differences across the states in personal income taxes and other revenue-generating methods.

The historic economic data do not conclusively support the contention that low business taxes alone have spurred economic development. Minnesota has clearly had the best employment growth rate of any of the Great Lakes states in the last 26 years, yet Minnesota also has the highest state and local business tax costs of the region. On the other hand, the economic performances of Indiana and Michigan appear to be identical in terms of employment growth rates, yet business taxes are higher in Michigan than Indiana. None of this is meant to imply that still higher taxes will engender even higher growth any more than lower taxes will do likewise. Regional economic growth remains a complex phenomenon that continues to defy simple explanations.

Notes

1. Timothy L. Hunt, *Michigan's Business Tax Costs Relative to the Other Great Lakes States*, W. E. Upjohn Institute, Kalamazoo, Michigan, February 1985.
2. Even though workers' compensation insurance and unemployment insurance are not general tax obligations, they are state controlled costs of doing business. As such, they are appropriate for inclusion in the study. Michigan's value added tax, the Single Business Tax, is compared to the aggregate of gross receipts, corporate income, and franchise taxes of the other Great Lakes states.
3. The technical documentation of the study is voluminous. For example, federal tax returns and state in-

come tax returns were completed for each prototypical firm in each state. Complete technical documentation will be available from the Institute for the cost of reproduction when the full study itself is published.

4. The primary sources of data for the study are various publications by the Internal Revenue Service, the U.S. Department of Commerce, the U.S. Department of Labor and others. Most of the data are from 1980 because that is the most recent year for which tax data are available, but they are used only in the form of ratios to develop the financial statements, e.g., 1980 industry investment to the value of shipments times firm sales to estimate firm investment. When the absolute level of some variable becomes critical, such as wages, we estimate the value for 1983.
5. The industry identification of firms is less important than the generic characteristics because any firm with similar operating characteristics, no matter the industry, would generally pay the same except for workers' compensation.
6. Workers' compensation insurance may be purchased from commercial carriers in many states. For the sake of convenience, we treat workers' compensation like any of the other taxes in this discussion.
7. These results are confirmed by another recent study that also goes on to claim that the state is now actually very slightly below the national average in workers' compensation costs. See Theodore St. Antoine, *Workers' Compensation in Michigan: Costs, Benefits, and Fairness*, report to Governor James J. Blanchard's Cabinet Council on Jobs and Economic Development, December 1984.
8. Experience rating refers to the component of the state UI tax rate that is determined by the specific unemployment record of each firm. All states practice experience rating to some degree.
9. Positive account employers in Michigan may credit one-half of the federal penalty charges they pay against their state UI tax liability.
10. These types of estimates are not a part of the current study.

Brief

There were 12,270 black-owned enterprises in Michigan in 1982, about 3.6 percent of the U.S. total of 339,239. In 1977, the previous survey year for minority-owned businesses in this country, Michigan had 3.7 percent or 8,511 of the U.S. total of 231,203.

The Bureau of the Census conducts economic censuses every five years. The *Survey of Minority-Owned Business Enterprises* provides data on businesses owned by blacks, persons of Spanish or Latin American ancestry, and persons of American Indian, Asian, or other minority origin or descent.

METHODOLOGY

The business population that filed IRS form 1040, Schedule C (sole proprietorships); 1065 (partnerships); or 1120S (subchapter S corporations) was identified from government administrative records (see Confidentiality of Data for safeguards). A subchapter S corporation is a special IRS designation for legally incorporated businesses with 25 or fewer shareholders who, because of tax advantages, elect to be taxed as individual shareholders rather than as corporations.

Names and addresses of minority-owned corporations that filed a regular 1120 tax return were assembled by a review of files of government agencies, public sources, and contacts with representatives of minority development programs. Data sources are more reliable and more numerous for some minority groups than for others. Although all known sources were researched to obtain data for 1120 corporations, this was a less systematic method than that used to compile data for the other forms of businesses, and coverage may not be complete. The extent of undercoverage cannot be measured.

The IRS provided the Census Bureau with the name and address, and employer identification number of the firm; social security numbers (SSN's) of the owners, partners or shareholders (up to 10 partners or shareholders per firm); principal industrial activity code (see Comparability of 1977 and 1982 Data); dollar receipts; and legal form of organization for businesses filing forms 1040, Schedule C; 1065; or 1120S. Although the maximum number of shareholders for an 1120S corporation was raised to 25 in 1981, the contract between the Census Bureau and the IRS requiring information for up to 10 partners or shareholders was already finalized. If an individual filed more than one of the above forms, each form was counted as a separate firm. The SSN's of the owners, partners, and shareholders were sent to the SSA, which provided the race codes that were indicated by the individuals on their original applications for SSN's. Persons applying for SSN's prior to 1981 could categorizes their race as (a) White, (b) Black, or (c) Other. In 1981 the racial descriptions on social security applications were expanded to (a) Asian, Asian-American, or Pacific Islander, (b) Hispanic, (c) Black, (d) Northern American Indian or Alaskan Native, and (e) White. In this publication, a noncorporate firm was classified as Black-owned if the sole owner or at least half of the partners in 1982 (limited to the 10 partners received) were Black. To classify an 1120S corporation, the number of shares listed for the 10 shareholders received from the IRS for 1982 was considered to be the number of shares for the entire corporation. If 50 percent or more of those shares were owned by Blacks, the firm was classified as a Black-owned corporation. In 1982, it was possible for a Black-owned firm to be classified in more than one minority group and to be included in the Spanish and/or Other Minorities report as well as the Black report.[1]

Data for the state, nation, and Michigan cities and counties having 100 or more black-owned firms in 1977 and 250 or more such enterprises in 1982 are shown in Table 1. Because of the severity of the 1982 recession in this state, the results for minority-owned businesses in this state are depressed. For example, in the United States in both 1977 and 1982, average gross receipts among black-owned firms stood at about $37,000. For 1982 the Michigan average was slightly higher—$38,000. But in 1977 the average for this state was $53,000.

Table 1. Black-Owned Business Enterprises in Michigan and the United States: 1977 and 1982

Area	Year	With paid employees				Without paid employees		Total	
		Number of firms	Employees[1]	Payroll[2] ($000)	Gross receipts ($000)	Number of firms	Gross receipts ($000)	Number of firms	Gross receipts ($000)
CITIES									
Ann Arbor[3]	1977	13	39	169	775	111	761	124	1,536
Benton Harbor[3]	1977	15	72	322	1,850	86	1,080	101	2,930
Detroit	1977	1,100	4,126	29,950	196,955	4,083	61,520	5,813	258,485
	1982	812	2,877	27,525	194,028	5,986	78,377	6,798	272,405
Flint	1977	83	271	1,662	9,313	356	3,239	439	12,552
	1982	67	218	1,998	20,054	567	6,427	634	26,481
Grand Rapids	1977	38	101	552	3,652	170	2,039	208	5,691
	1982	30	84	620	4,515	222	2,904	252	7,419
Inkster[3]	1977	30	137	1,186	6,998	115	2,032	145	9,030
Kalamazoo[3]	1977	15	55	331	1,579	91	964	106	2,543
Lansing	1977	19	42	285	1,266	97	576	116	1,842
	1982	17	25	159	902	242	1,579	259	2,481
Pontiac[3]	1977	28	65	404	2,518	118	1,865	146	4,383
Saginaw[3]	1977	27	67	336	3,256	101	1,489	128	4,745
Southfield[4]	1982	43	148	2,444	9,934	307	6,609	350	16,543
COUNTIES									
Berrien[3]	1977	25	98	541	2,994	151	1,861	176	4,855
Calhoun[3]	1977	23	69	430	1,794	102	764	125	2,558
Genesee	1977	90	296	1,814	10,304	407	3,628	497	13,932
	1982	77	247	2,331	21,940	703	7,564	780	29,504
Ingham	1977	20	60	349	2,334	110	1,139	130	3,473
	1982	23	57	450	3,640	310	2,346	333	5,986
Kalamazoo[3]	1977	19	62	390	1,839	117	1,131	136	2,970
Kent	1977	42	106	580	3,819	206	2,371	248	6,190
	1982	39	D	D	D	339	D	378	12,527
Macomb[3]	1977	36	162	885	5,847	110	1,651	146	7,498
Oakland	1977	93	886	17,071	77,125	362	6,388	455	83,513
	1982	120	480	5,922	34,180	893	12,947	1,013	47,127
Saginaw[3]	1977	33	89	446	4,809	130	1,859	163	6,668
Washtenaw	1977	34	167	1,273	8,925	191	1,287	225	10,212
	1982	46	126	1,173	9,087	424	2,870	470	11,957
Wayne	1977	1,206	4,594	33,389	223,230	4,500	68,403	5,706	291,633
	1982	916	3,377	32,255	227,810	6,590	85,538	7,506	313,348
Michigan	1977	1,719	6,952	59,278	354,102	6,792	95,241	8,511	449,343
	1982	1,446	5,374	49,443	337,914	10,824	132,415	12,270	470,329
United States	1977	39,968	164,177	1,135,144	6,396,850	191,235	2,248,350	231,203	8,645,200
	1982	38,631	165,765	1,530,799	8,529,062	300,608	3,914,510	339,239	12,443,572

SOURCE: Bureau of the Census, **1982 Survey of Minority-Owned Business Enterprises** (Washington, D.C.: 1985), MB82-1, Tables 3, 6, and 7; and a similar document for 1977.
D. Withheld to avoid disclosing data for individual companies.
1. Pay period including 12 March.
2. Annual.
3. Data for 1982 not available.
4. Data for 1977 not available.
NOTE: 1977 county and city data compiled for area with 100 or more black-owned firms; 1982 county and city data compiled for areas with 250 or more black-owned firms.

Over two-thirds of Michigan's black-owned enterprises were located in the city of Detroit in 1977; these businesses accounted for 57.5 percent of receipts among such undertakings in the state. The 1982 results show Detroit having 55 percent of the businesses and 57.9 percent of the receipts. In other words, although Detroit failed to keep pace in the number of black-owned enterprises, the average size of firms here declined considerably less than the statewide average. Information on total business activity in the City of Detroit, though sketchy, suggests that the black share has increased. Similar figures for the state suggest a decrease in Michigan as a whole.

Table 2 gives a breakdown of black-owned businesses by type of economic activity. In the city of Detroit, its suburbs, and in the rest of the state, over half of black business activity was in the area of retailing, a category which accounted for about a third of the U.S. total. This means that in every other group of industries in this state, the share of total was proportionately less. To some extent, the deep recession here in manufacturing, construction, and suppliers of various services to the

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Table 2. Black-Owned Business Enterprises in Michigan and the United States, by Industry Group: 1982

	All firms							
	City of Detroit		Detroit SMSA[1]		Michigan		United States	
Industry group	Number	Sales and receipts ($000)	Number	Sales and receipts ($000)	Number	Sales and receipts ($000)	Number	Sales and receipts ($000)
Agricultural services, forestry, fishing, and mining	71	832	90	1,212	115	1,583	5,105	165,387
Construction	389	15,833	507	19,292	688	25,755	23,061	994,816
Manufacturing	51	9,387	71	11,337	101	15,027	4,171	987,960
Transportation and public utilities	402	13,947	498	19,196	647	22,683	24,397	795,187
Wholesale trade	41	3,554	60	8,692	83	12,607	3,651	858,584
Retail trade	1,784	144,855	2,296	199,787	3,328	251,173	84,053	4,118,526
Finance, insurance, and real estate	319	12,609	436	14,496	585	16,433	14,829	748,136
Selected services	3,244	61,933	4,130	83,588	5,821	110,718	147,263	3,248,864
Industries not classified	497	9,455	643	11,171	902	14,350	32,709	526,012
Total	6,798	272,405	8,731	368,771	12,270	470,329	339,239	12,443,572

SOURCE: Bureau of the Census, **1982 Survey of Minority-Owned Business Enterprises** (Washington, D.C.: 1985), MB82-1, Tables 1, 4, 5, and 7.
1. The Detroit Standard Metropolitan Statistical Area is comprised of Wayne, Oakland, Macomb, St. Clair, Livingston, and Lapeer counties.

goods-production industries skewed the data in favor of retailing. However, it also is true that large corporations are more dominant in this state than nationally which could mean that retailing offers the avenue of least resistance for entrepreneurs, regardless of race.

Note

1. U.S. Department of Commerce, Bureau of the Census, *1982 Survey of Minority-Owned Business Enterprises—Black* (Washington, D.C.: 1984), III-IV.

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A Profile of Teenage Pregnancy in Detroit

by KURT GORWITZ, *Sc.D., consultant, New Detroit, Inc.*

Based on the latest available figures for Detroit:

- 1 female in 35 will become pregnant and 1 in 60 will have a baby before age 15.
- approximately 1 in 6 teenagers, aged 15-19 years old, will become pregnant during the course of a year, 1 in 15 will have an abortion, and 1 in 11 will deliver a baby.
- in an average high-school class with 15 female students, 5 will have had an abortion by age 20, 5 will have delivered a baby, and 2 of these will have borne 2 or more children. One out of 2 who become pregnant will have an abortion.
- about 750 of the 3,600 teenagers who become mothers each year will themselves be the child of a teenage mother. Some of their babies will have grandmothers and perhaps grandfathers who are 30 years of age or even less.
- approximately 1 out of 20 (350) pregnant students will fail to complete her high-school education each year. Some may return subsequently, but most will be permanent drop-outs. Those who do return will be less likely to have another baby before reaching 20 years than those who don't. A comparable number of boys will drop out of school because of impending parenthood.

Residents of Detroit had 116,720 live births between 1978 and 1983, equal to an average annual rate of 16.2 per 1,000 population. The rate for all Michigan residents during this period was slightly lower, 15.7. The fertility rate, which relates live births to the number of women of childbearing age (15-44 years), also is slightly higher here (62.6 versus 61.7), indicating that this is a true difference and not due to a higher proportion of young women. It probably reflects the greater proportion of low-income, nonwhite residents in Detroit who have a relatively high reproductive rate. The number of live births decreased 11.3 percent, from 20,195 to 17,922 between 1978 and 1983 due to the declining resident count, the gradual aging of the population, and an ongoing drop in fertility levels among black and white women. The 62.6 fertility rate is equal to an average of less than 2 children per woman aged 15-44.

HEALTH RESOURCES

Detroit has 24 acute-care hospitals with 8,485 beds, including 10 that have 413 beds for obstetrics. The largest facility, Henry Ford, has 907 beds, of which 34 are obstetrical. Detroit-Macomb has the largest number of obstetrics beds (68), while Sinai had the largest number of deliveries (3,447 in 1983). The 10 hospitals with obstetrics units had 22,734 deliveries in 1983, compared with 17,922 babies born to residents of the city. That is, about 1 in 5 births recorded here were to residents of other areas, primarily the remainder of Wayne as well as Macomb and Oakland counties. The ratio of 1 hospital bed for every 129 residents is nearly double the ratio of 1 per 246 for the entire state and reflects the continuing concentration of such facilities in the city and their utilization by nonresidents, particularly from nearby suburbs. The ratio of 1 obstetrics bed for every 54 deliveries is higher than the statewide figure (1 per 40) and equals an occupancy rate of about 65 percent, although this varies considerably between hospitals. While half of all Wayne County residents live in the city, 2 out of 3 acute-care hospital beds are located there.

There are 635 physicians (514 M.D.s and 121 D.O.s) engaged in active practice in Detroit, including 109 obstetricians. This is equal to 1 doctor for every 1,715 residents, or 1 obstetrician for every 209 deliveries recorded in the city. These ratios compare unfavorably with the statewide 1 per 492 and 1 per 128, respectively, and reflect the location of many physicians in suburban areas beyond the borders of major cities. Such data must be considered with caution because of the uneven distribution throughout the city and the location of many patients and physicians in close proximity to Detroit. More than 2 out of 3 Wayne County doctors practice outside the city, the reverse of the hospital bed ratio.

Detroit women had 62,404 reported abortions between 1980 and 1984, approximately 2 for every 5 pregnancies. Most were performed in one of the centers located in the city, which also did a considerable number of abortions for residents of other areas. Detroit's ratio of pregnancies terminated by abortions, like other metropolitan areas, is higher than the comparable statewide figure due to the concentration of resources there which provide a ready access to these services. While the number of abortions recorded in the city decreased from 12,716 in 1982 to 11,692 in 1983, it rose once again in 1984 (to 12,051). Although reporting to the State Public Health Department has been mandatory since 1980 by statute, nonreporting is believed

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Michigan Economic Indicators

Item	Year previous of latest month	Previous month	Latest month
Manufacturing workers			
Average weekly hours, Michigan	44.5	42.4	44.6 (Dec.)
Average weekly hours, U.S.	41.2	40.9	41.6 (Dec.)
Average hourly earnings, Michigan ($)	12.64	12.71	12.84 (Dec.)
Average hourly earnings, U.S. ($)	9.40	9.61	9.71 (Dec.)
U.S. motor vehicle production (units)	767,937	956,927	721,394 (Dec.)
Electricity usage (mil. kwh.)			
Michigan	6,009	6,453	6,446 (Sept.)
United States	198,365	208,922	205,650 (Sept.)
Raw steel production			
Michigan (000 net tons)	604	613	574 (Dec.)
United States (000 net tons)	6,013	7,051	6,728 (Dec.)
Consumer price index (1967 = 100)			
Detroit area	309.1	323.1	323.1 (Dec.)
United States	315.5	326.6	327.4 (Dec.)
U.S. producer price index (1967 = 100)	309.9	309.7	310.2 (Dec.)
Michigan farm prices received index (1977 = 100)	121	113	115 (Dec.)

SOURCE: U.S. Bureau of the Census; U.S. Bureau of Labor Statistics; Michigan Crop Reporting Service; Ward's Automotive Reports; American Iron and Steel Institute; and Energy Information Administration.

Permit Authorized Construction in Selected Counties, Cumulative 1984 and Preliminary 1985

(Thousands of dollars)

	Residential		Industrial		Office		Mercantile	
	1984	1985	1984	1985	1984	1985	1984	1985
Allegan	12,910	2,409	1,304	380	867	0	681	468
Antrim	12,745	6,205	164	17	0	907	0	682
Berrien	10,728	2,975	2,469	1,008	1,384	170	1,990	329
Clinton	11,003	10,239	23	848	0	71	562	363
Emmet	9,922	6,556	1,277	341	0	160	68	0
Genesee	30,781	46,411	14,901	28,056	7,227	14,967	17,531	15,304
Grand Traverse	24,373	18,135	2,524	1,876	1,732	1,055	2,139	1,755
Ingham	41,694	49,906	3,078	5,812	11,987	14,762	5,305	8,689
Jackson	8,492	4,605	677	331	121	1,107	1,549	854
Kalamazoo	31,667	31,923	9,634	2,319	3,591	14,901	2,919	2,907
Kent	117,397	125,809	23,021	49,081	22,014	27,280	12,760	10,913
Livingston	20,500	37,389	3,612	26,819	870	1,189	2,142	1,900
Macomb	129,925	210,990	48,884	72,801	6,759	13,245	25,184	36,163
Midland	21,835	10,056	539	159	3,534	1,472	1,045	368
Muskegon	14,741	7,635	3,646	1,761	1,176	593	3,332	2,806
Oakland	328,731	575,440	87,180	117,549	182,449	226,349	31,770	37,169
Ottawa	45,817	62,863	15,176	22,830	1,468	3,546	4,674	2,369
Saginaw	11,199	4,558	979	729	1,488	1,374	2,402	4,391
St. Clair	11,871	15,468	1,940	6,070	1,805	884	1,117	714
Washtenaw	43,494	76,495	18,225	16,852	19,561	15,738	1,248	5,945
Wayne	137,170	180,474	53,252	155,812	50,064	48,827	31,952	62,803
MICHIGAN	1,324,249	1,692,260	330,995	552,114	353,878	401,833	174,179	226,071

SOURCE: Bureau of the Census, special release.

to be extensive, particularly where the procedure is performed in a private office setting.

PROFILE OF TEENAGE PREGNANCY

The 1980 census recorded 52,599 female residents aged 15-19 in Detroit and 30,093 between 12 and 14 years of age. Because of decreasing birth rates throughout the 1960s, these numbers are estimated to have declined to 45,000 and 27,000 respectively. A further drop to about 42,000 and 26,000 by 1990 is likely, to be followed for several years by a very slow increase.

Among the 116,720 resident live births between 1978 and 1983, 24,889 or 21.3 percent were to mothers less than 20 years of age. This is about 50 percent higher than the 14.0 percent for all of Michigan. However, 14.9 percent of all white mothers in the city were teenagers at the time of delivery, compared with 24.2 percent of black mothers. Black women accounted for 79.0 percent of all teenage births and 86.4 percent of all births under 17 compared with 67.2 percent in the 20 and over age group. Since Detroit has a greater percentage of black residents than the total state, this disparity accounts for the higher proportion of teenage births noted here. Of the 24,889 teenage mothers, 5,487 or more than 1 out of 5, had 1 or more previous deliveries, including 27 who were under 15 years of age. About 40 percent (10,708) of teenage mothers were less than 18 years of age, including 1 who was 11 years old and 23 who were 12. The marital status of parents is not reported in Michigan birth certificates. However, national estimates are that half of teenage mothers are not married at the time of delivery and that this proportion is increasing. Virtually all under 17 years are unmarried.

Data on the fathers were recorded in 5,623 of the 24,889 teenage deliveries, including only 25 of the 798 where the mother was less than 15 years of age. Data from national studies indicate that in these cases most of the fathers are teenagers also. Where the mother was 15-19, 21.3 percent of known fathers were in the same age group, 59.9 percent were 20-24, and 18.8 percent were 25 or older. A majority of the fathers not listed on birth certificates where the mother is between 15 and 19 are believed to be teenagers or in their early 20s.

Miscarriages (spontaneous deliveries before the twentieth week of pregnancy) are not reported to public health authorities. Based on figures available elsewhere, Detroit teenagers are estimated to have approximately 1,200 miscarriages per year. Stillbirths (babies born dead after 20 weeks of pregnancy) were infrequent, an average of 40 per year. With an average of 3,800 live births and about 3,500 abortions, this is a total of 8,540 pregnancies per year, or approximately 1 for every 6 females aged 15-19. The ratio is lower, about 1 out of 10, for women aged 20-44. Among girls between 12 and 14 years, an average of 1 out of 110 became pregnant each year.

The relatively high proportion of teenage births in Detroit is a 6-year average. In fact, there has been a steady decline in births to both white and black teenagers during the period. The annual figure decreased 23.9 percent, from 4,800 to 3,655, between 1978 and 1983 with comparable declines for both racial groups. This compares with a 7.3 percent drop in births to women 20 years or older. Overall, live births declined 11.3 percent, from 20,195 to 17,922, during this period. As a proportion of all live births, the decline in teenage deliveries was from 23.8 percent to 20.4 percent. Despite this favorable experience, teenage birth rates continue to be considerably higher in the city than in the rest of Michigan. There has been an increase in the last year in the number of babies born to mothers under 15 years of age. Because of the relatively small number of these births (less than 150 per year), it will take several more years before a definite conclusion can be reached as to its significance.

Of the 24,889 teenagers who became mothers between 1978 and 1983, 798 were under 15 and the remainder were 15-19 years of age. The number of females in this latter group decreased about 3,000 per year in the late 1970s and early 1980s due to the rapidly falling number of live births during the 1960s. This would account for some of the drop in the number of teenage births noted between 1978 and 1983. It should lead to some further, ongoing decline throughout much of the 1980s before leveling off near the end of the decade. However, the smaller number of females in the 15-19 year age group can only explain about one-third of the reduction in teenage deliveries which has already taken place. Part of the remainder may be due to an increasing, relatively high level of reported abortions. About 1 in 2 teenage pregnancies is now terminated by abortion, compared with 1 in 3 in the 20 and over age group. More than half of the drop clearly is due to the actual continuing decline in teenage pregnancies, a trend which has been noted elsewhere in Michigan also. This indicates that education and changing mores have led to declining sexual activity and/or increasing knowledge and utilization of effective methods of birth control.

While this certainly can be construed as a positive experience, live births to teenage mothers will have to be a continuing concern to all involved individuals. There are several important reasons and considerations. While the number of babies born to teenage females living in Detroit should decrease further in coming years, it almost certainly will remain above 3,000 per year on the basis of current trends. In 1980-83, teenagers accounted for 20.4 percent of all live births, but they had 23.1 percent of the 9,094 low-weight babies (2,500 grams or less). They accounted for 37.1 percent of the 2,680 women who did not begin their prenatal care until the third trimester (after 26 weeks of pregnancy), and 32.1 percent (565) of the 1,760 mothers who had no prenatal visits were teenagers. Among the 3,260 mothers whose education was limited to 8 years or less, 43.3 percent (1,412) were teenagers. Further, they accounted for 29.4 percent of all abortions, 21.4 percent of all stillbirths (babies born dead after 20 weeks of pregnancy), and 26.4 percent of all infant deaths (those dying in the first year of life).

IMPACT OF TEENAGE PREGNANCY

While the total cost to the community of these births to teenage mothers is not known, rough approximations are possible on the basis of figures computed elsewhere.[1] These would indicate that the 3,655 births to teenage mothers in 1983 cost an average of about $3,000 each for services related to prenatal care and delivery, or a total of $10,965,000. The cost of future social services and other community support for the mother and/or child is estimated to average $14,000, or a total of $49,924,000. These figures combined are equal to a cost of $55 for each of Detroit's 1,089,000

residents. This is an appreciable portion of all the money spent for local public purposes. The actual figure is even higher since this does not include medical and other costs estimated at more than $1,100,000 related to the nearly 3,700 abortions and stillbirths. At the state level, half of all women receiving funds through Aid For Families of Dependent Children (AFDC) had their first baby before age 18.

The impact of pregnancy and parenthood on the adolescent father has, in general, not been adequately recognized. Although some accompany their female partner on prenatal medical visits and are present at the birth of their child, most do not. Consequently, many do not establish an early emotional and psychological bond with their infant child. This gap is often reinforced by the adolescent mother's parent(s) who commonly are antagonistic to a continuing relationship between their daughter and the baby's father. Although fathers legally are co-equal parents with the mother, most do not know this. Some may not care, but others respond to these rejections by withdrawing from what had been a functioning relationship. Further, community service agencies commonly do not acknowledge the existence of adolescent fathers-to-be and fail to provide services for them. The ultimate result may be lowered self-esteem related to feelings of inadequacy, frustration, anxiety, and guilt leading to acts of hostility to the mother and/or child.

The state does not tabulate most social service data for individual cities. However, in 1984 it provided an estimated more than $18.7 million in the form of food stamps, AFDC and other grants in aid to 4,425 teenagers living in Detroit who were pregnant and/or parents of children. Medicaid expenditures were $12.8 million. About 1 in 3 pregnant/parenting teenagers sought assistance. The average annual aid per case was $4,225 plus $2,900 for Medicaid. The comparable statewide cost for 15,319 teenage recipients exceeded $50 million per year for AFDC and other grants, more than $15 million for food stamps, and $45 million for Medicaid, or a total of $110+ million.

Pregnant teenagers may not be excluded from regular classes in public schools which receive federal funds (Title IX of the 1972 Education Amendments). This was preceded in Michigan by P.A. 242 of 1970 which barred such expulsions. The state was one of the first to adopt this legislation. In Detroit, a pregnant teenager from the public schools may also choose to attend the Continuing Education for Girls Program. Detroit pioneered in this effort, which was originally established in 1966. It presently serves an average of 350 students per year, about 15 percent of all pregnant high-school-age girls. Most subsequently either return to their former schools or graduate; only a small minority drop out. The program will relocate soon to larger quarters, which will permit an expansion in the number of students enrolled.

Having a baby frequently results in the mother's self-termination of her education despite growing efforts to induce her to remain in school until graduation. This may also be true for the father, who in perhaps 75 percent or more of all such pregnancies is a teenager too.

National data indicate that teen parents (both mother and father) on the average complete fewer years of schooling than those who delay initial parenthood into their twenties. Half of all women who had their first baby before age 18 did not graduate high school, and pregnancy was the leading cause for female students dropping out of school. Compared with older parents, teen parents tend to have a larger number of children, to face a higher probability of being a single parent, to experience poverty more persistently, and to be disproportionately represented among recipients of social service support programs. Teen mothers are less likely to obtain timely and appropriate prenatal care, to eat and exercise properly, and as a result are more likely to have pregnancy complications and to deliver premature/low-weight babies which have a higher probability of death during the first year of life. This is particularly true for teenage mothers under 17 years of age. Their infant death rate is 2 to 3 times the comparable figure for older women.

Dropping out of school before graduation generally reduces subsequent employment opportunities and income. This in turn may lead to high levels of frustration and tension, resulting in child abuse and mistreatment. About 450 cases of child abuse are reported each year in Detroit and approximately 200 of these offenders either are or were teenage parents. The actual extent of this is difficult to gauge, since available figures are believed to greatly understate the true number of cases. Most never come to the attention of authorities because they are unrecognized or because the child, relatives and neighbors fail to report these occurrences due to negligence, fear or shame. An estimated half of all abusive parents had children before they were 20 years old even though less than one-fourth of all parents are in this age group.[2]

Adoption, a possible course of action for teenage parents, is infrequently utilized. Data from the Probate Court, the required legal site for adoptions, do not show the age of the biologic mother or of her child. They indicate that about 3.5 percent of all children born to city residents are released for subsequent placement, with the majority going to step-parents. This would suggest that most of those adopted are past infancy. Staff of local placement agencies believe that the adoption figure is lower for teenagers than for women 20 years or older, with 99+ percent choosing to retain their babies. These agencies now handle less than 150 placements per year, including 15 to 25 by teenage mothers, or about 1 percent of all babies born in Detroit. Those placed through other sources are assumed to be even fewer. A recent Court of Appeals decision restricts such private placements further in cases where adoptive parents are nonstate residents. The number of adoptions has decreased appreciably in recent years, due to such factors as enhanced resources available to the mother, the reduced stigma of single parent households, and the decline in unwanted deliveries. Another reason may be that there are a limited number of adoptive families available for infants with black biologic parents.

HEALTH-RELATED RESOURCES

Detroit public schools had a total enrollment of 192,998 as of February 1985, including 49,119 in grades 9-12. In addition, there are 3 parochial and other nonpublic high schools in the city. While the number of Detroit students in these schools and some others nearby is not known, it probably is about one-third of the 17,899 who are Wayne County residents. The public school system offers a mandatory sex-education program which meets standards for approval of the Michigan Department of Education developed on the basis of Public Act 226 of 1977. This

statute for the first time permitted the inclusion of birth control instruction in sex-education programs. While parents may ask to have their children excused, few do. Thus, 95+ percent of high school graduates have attended the program. However, those who drop out of school may fail to do so. The system also has counselors, nurses, social workers, and psychologists who may provide guidance and information concerning sexuality.

The Detroit Health Department with a broad range of services throughout the city is the major health resource for teenagers. Planned Parenthood has an affiliated office in Detroit and provides a comprehensive range of services at two locations, downtown and in the northwest part of the city. It reported serving 633 teenage clients last year with programs ranging from counseling to provision of birth control devices/procedures. It does not perform abortions but provides information on available facilities.

National statistics have shown that only a minority of teenagers derive their sexual knowledge from communication with their own parents or through formal instruction in school. If, as seems likely, this is true in Detroit, then a majority of adolescents would appear to get this information from sources with limited expertise or reliability such as books, magazines, movies, and other teenagers or older siblings.

DISCUSSION

Much of what is written in this profile focuses on the "what" of adolescent pregnancy and parenthood. We know the demographics. We know the ages of pregnant teenagers, what percentage choose to abort pregnancies, what percentage are actually giving birth—and a great deal more.

What we do not know is the "why" of adolescent pregnancy and adolescent parenthood. Why do some teenage girls become pregnant? Not all do and not all who engage in intercourse get pregnant. Why? What do we know about emotional, psychological, and social antecedents of adolescent pregnancy? What is the environmental mileau in which adolescent pregnancy is likely to occur or not occur?

There are 5 related social factors mentioned currently in the research.[3]

1. Religiosity. The **less** religious the young person, the **more** likely he or she is to have experienced intercourse.
2. Early and frequent dating. Early dating is associated with early intercourse. The more frequently a couple dates, the more committed their relationship, the more likely they will engage in intercourse.
3. Parenting styles. The less parental support, the fewer parental controls, the less parental disapproval of problem behavior, the more likely that adolescents will engage in sexual intercourse.
4. Pressure. Peer pressure regarding sexual activity has a considerable influence on boys and girls.
5. Lack of educational ambition. Adolescents who have minimal educational ambition and who have a low value towards educational achievement are more likely to have early intercourse than those with the ambition to achieve.

In addition, while research indicates that the great majority of pregnant adolescents did not intend to become pregnant despite their nonuse of contraception, **many** young mothers whose pregnancy was unintentional **didn't care** whether or not they became pregnant. Low socioeconomic status and lack of interest in school are two factors that contribute to a mileau in which there are few alternatives for recognition and status—other than motherhood.

SUMMARY

The facts presented here indicate that teenage pregnancy continues to be a frequent occurrence in Detroit and, therefore, should be a matter of community concern to all individuals because of its destructive impact on the infant, its parents, family, and community. It is the responsibility of involved local residents to be cognizant of these facts and to develop and initiate appropriate preventive and remedial actions.

NOTES

1. Walentik, David S., Ph.D. *Teenage Pregnancy, Economic Costs to the St. Louis Community*. The Danforth Foundation, November 1983.
2. Dr. Ray Helfer of Michigan State University, cited in *Detroit News*, February 13, 1985.
3. McAnarney, Elizabeth R., and Shreider, Corrine. "Identifying Social and Psychological Antecedents of Adolescent Pregnancy: The Contribution of Research to Concepts of Prevention." William J. Grant Foundation, March 1985.

TABLE 1
Number of Detroit Resident Live Births by Age of Mother, Race of Child, and Year of Birth
1978–1983

Year of Birth	Total	White	Black	Other and Unknown
1978	20,195	6,127	13,885	183
1979	20,639	6,193	14,249	197
1980	20,535	6,013	14,311	211
1981	18,953	5,576	13,173	204
1982	18,476	5,341	12,968	167
1983	17,922	4,927	12,822	173
Change	-2,273	-1,200	-1,063	-10
Less Than 20 Years of Age				
1978	4,800	1,100	3,684	16
1979	4,617	1,016	3,582	19
1980	4,348	879	3,444	25
1981	3,820	778	3,019	23
1982	3,694	676	2,953	20
1983	3,655	644	2,984	27
Change	-1,145	-456	-700	+11
Percent Less Than 20 Years of Age				
1978	23.8	18.0	26.5	8.7
1979	22.4	16.4	25.1	9.6
1980	21.2	14.6	24.1	11.8
1981	20.2	14.0	22.9	11.3
1982	19.7	12.7	22.8	12.0
1983	20.4	13.1	23.3	15.6
Change	-3.4	-4.9	-3.2	+6.9

SOURCE: Michigan Public Health Department.

TABLE 2

Number of Detroit Resident Live Births by Age of Mother and Selected Birth Factors, 1980–1983

	Number			Rate per 1,000 Live Births		
	Total	Less Than 20	20 or More	Total	Less Than 20	20 or More
Total Live Births	75,885	15,472	60,413			
Low Birth Wt. (2,500 gm.)	9,094	2,088	7,006	12.0	13.5	11.6
Congenital Anomalies	752	175	577	1.0	1.1	1.0
Mother—8th Grade or Less	3,260	1,412	1,848	4.2	9.1	3.1
Previous Births	44,939	3,413	41,526	59.2	22.1	68.7
Number of Prenatal Visits						
More Than 5	65,854	12,394	53,460	86.8	80.1	88.5
1 - 5	8,271	2,513	5,758	10.9	16.2	9.5
None	1,760	565	1,195	2.3	3.7	2.0
Onset of Prenatal Care						
First Trimester	51,375	8,347	43,028	67.7	54.0	71.2
Second Trimester	14,695	4,468	10,227	19.4	28.9	16.9
Third Trimester	2,680	976	1,704	3.5	6.3	2.8
None	1,760	565	1,195	2.3	3.7	2.0
Unknown	5,375	1,116	4,259	7.1	7.2	7.1

SOURCE: Michigan Public Health Department.

TABLE 3

Estimated Annual Cost of Social Service Programs Where Primary Recipient Is a Teenager*

	Total	Grants**	Food Stamps	Medicaid	Number of Recipient Families
Detroit	$ 31,490,000	$14,500,000	$ 4,229,000	$12,761,000	4,425
TOTAL MICHIGAN	$113,590,000	$52,975,000	$15,450,000	$45,165,000	15,319

*Based on January 1985 estimates for Detroit and total Michigan; includes pregnant teenagers who have not yet delivered their baby.
**Aid for Families of Dependent Children and General Assistance.
SOURCE: Michigan Department of Social Services.

TABLE 4

Number of Live Births to Detroit Teenage Mothers by Race of Child and Age at Time of Delivery, 1978–1983

Age of Mother	Total	White	Black	Other and Unknown
11	1	—	1	—
12	23	3	20	—
13	145	8	135	2
14	629	59	566	4
15	1,726	205	1,514	7
16	3,307	519	2,770	18
17	4,877	890	3,957	30
18	6,602	1,486	5,084	32
19	7,579	1,923	5,619	37
TOTAL	24,889	5,093	19,666	130

SOURCE: Michigan Public Health Department.

BRIEF

EXCELLENT CROP YIELDS

Yields of major field crops grown in Michigan were superb in 1985. Spring planting was completed early. Crop development was pushed by an unusually high accumulation of growing degree days during April and May. There were drought worries in June and early July, but those concerns were ended by an unusually wet mid-summer. The heavy rains continued into the fall. Surplus moisture hindered farmers' harvesting throughout October and November. Many producers had to wait until soils froze in late December and early January to bring in their last fields of soybeans and corn. Nevertheless, yields were higher than many had anticipated.

The State average corn yield in Michigan was 105 bushels per acre, the second highest ever. Production topped 286 million bushels. The average yield of soybeans combined in the Great Lakes State in 1985 was 32 bushels per acre, 1 bushel below the 1980 record high. Production of the oilseed was 34.6 million bushels. Dry edible bean production was just over 5.4 million cwt. The yield was 1,320 pounds per acre. Sugarbeet production was 2,325,000 tons.

Corn production in the U.S. was 8.9 billion bushels. The national yield was 118 bushels per acre. The top two states in production were Iowa and Illinois. The corn yield in Illinois was 135 bushels per acre; it was 126 bushels per acre in Iowa. National soybean production was about 2.1 billion bushels; the yield was 34 bushels per acre. Illinois, the top state in production, had a yield of 42 5 bushels per acre.

FRUIT PRODUCTION INCREASES

Overall output of Michigan's seven major fruit crops during 1985 rose 28 percent to 788,500 tons. Fruit growing conditions were generally excellent throughout the season, except for spotty hailstorms and windy weather during harvest. The state had another large tart cherry crop. Quality was generally excellent throughout the year. Sweet cherry production was down 6 percent from a year ago but quality was excellent. Apple production at 1.1 billion pounds was 43 percent higher than last year and set a state record. Excellent weather during bloom resulted in a large fruit set. This, combined with timely rains which helped fruit sizing, plus many new bearing trees coming into production were the main reasons for the record crop. The grape crop was affected by rains prior to and during harvest, but the Brix was very high this fall and the overall quality was rated "vintage." Prune-plum output was 8 percent less than last year. Fruit size was excellent, but rain prior to harvest reduced the sugar content. Peach output was up 22 percent from a year ago. Size and quality were generally excellent. Pear production was substantially below last year with good quality being the rule.

JANUARY FARM PRICES SLIP

The Index of Prices Received by farmers in Michigan for all farm products as of January 15, 1986, was 112 percent of its 1977 base. That index was down 1 percent from December. The price index is 9 percent below its level of a year earlier.

SOURCE: This material originated from the Agricultural Reporting Service, "Agriculture Across Michigan," Vol. VIII, No. 2, February 15, 1986

The price index for all crops grown in Michigan fell 1 percent from December. Slight price increases for oats and soybeans were offset by declines in corn and wheat prices. The livestock and livestock product price index for Michigan also fell 1 percent from the previous month. The prices of slaughter hogs, steers and heifers, milk and eggs all dropped. The prices of slaughter calves and cows inched up. The crop price index and the livestock price index were 11 and 7 percent below their January, 1985, levels, respectively.

The U.S. Index of Prices Paid by Farmers for commodities, services, interest, taxes and wages in January was 163 percent of its 1977 average. The index was 1 point higher than in December but 1 point below a year earlier.

The January Index of Prices Received for All U.S. Farm Products decreased 4 points from December to 124 percent of its 1977 average. Lower prices for lettuce, cattle, turkeys, oranges, and wheat were partially offset by higher prices for soybeans and corn. The index was 9 percent below its level in January, 1985.

DRY BEAN STOCKS UP

Commercial elevators in Michigan held 3,175,000 hundredweight (cwt.) of dry beans in storage as of December 31, 1985. Dry bean stocks in elevators were 12 percent above last year's level. The quantity in elevators included 2,800,000 cwt. of navy beans and 375,000 cwt. of all other classes. Stocks on hand a year ago included 2,550,000 cwt. of navy beans and 275,000 cwt. of all other classes. An estimate of the quantity of dry beans held on farms is not made.

Dry bean stocks data included in this report were tabulated from information supplied by elevator operators on the Grain Dealers Daily Position Report filed monthly with the Michigan Department of Agriculture

STORAGE BINS FULL

Stocks of major grains in Michigan storage facilities on January 1, 1986, were much higher than a year earlier. There were nearly 270 million bushels of corn in storage, 57 percent above the January 1, 1985, level. About three-fourths of the corn was stored on farms. Soybean stocks were just under 29 million bushels, up 27 percent from 1985. On-farm storages held about two-thirds of the soybeans. Wheat stocks, 19.1 million bushels, and oats stocks, 17.6 million bushels, were also above levels of a year ago.

Corn stored in all positions in the U.S. on January 1 was estimated at nearly 7.9 billion bushels, 34 percent more than the January 1, 1985, total. U.S. soybean stocks were 1.76 billion bushels, up 24 percent from a year earlier. Wheat in storage was 2.54 billion bushels, 18 percent more than last January 1. Oats stocks in th U.S. were 379 million bushels, up 9 precent from a year earlier.

POTATO STOCKS UP

Potato growers and processors in Michigan held 6.6 million hundredweight (cwt.) of potatoes on January 1, 1986. This is an increase of 2 percent from a year ago. Disappearance of the 1985 crop from harvest to the end of the year was 5.5 million cwt. Stocks a year earlier were 6.5 million cwt., and disappearance for the comparable period was 6 million cwt. Disappearance includes sales, shrinkage and waste.

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Quarterly Personal Income in Michigan

	Millions of dollars, annual rates, seasonally adjusted								Percentage change 85(2)	Percentage change 85(3)
	1983	1984				1985				
	4	1	2	3	4	1	2	3	Michigan	United States
TOTAL LABOR AND PROPRIETORS' INCOME BY PLACE OF WORK										
By Type										
Wage and salary disbursements	66,544	68,713	69,531	70,343	72,568	74,233	75,228	76,749	2.0	1.2
Other labor income	8,193	8,473	8,500	8,578	8,946	9,172	9,285	9,527	2.6	1.7
Proprietors' income	3,082	3,610	3,340	3,410	3,529	3,542	3,677	3,489	-5.1	-5.6
Farm	352	684	293	408	453	389	452	175	-61.3	-50.6
Nonfarm	2,730	2,926	3,046	3,001	3,076	3,153	3,226	3,314	2.7	3.3
By Industry										
Farm	726	1,051	654	767	818	761	832	563	-32.3	-32.7
Nonfarm	77,093	79,745	80,717	81,563	84,226	86,185	87,358	89,202	2.1	1.4
Private	66,159	68,786	69,533	69,943	72,844	74,559	75,395	76,890	2.0	1.4
Ag. Serv., For., Fish., and other	168	173	176	183	182	191	203	203	0	1.1
Mining	279	262	307	316	328	335	343	336	-2.0	-0.2
Construction	2,522	2,546	2,798	2,543	2,673	2,677	2,865	2,997	4.6	1.2
Manufacturing	30,974	32,436	32,462	32,809	34,720	35,589	35,168	36,019	2.4	0.5
Nondurable goods	5,423	5,679	5,722	5,773	5,924	5,993	5,969	6,084	1.9	0.7
Durable goods	25,551	26,757	26,740	27,036	28,797	29,596	29,199	29,935	2.5	0.5
Transportation and public utilities	4,548	4,616	4,607	4,628	4,722	4,789	4,885	4,933	1.0	1.5
Wholesale trade	4,115	4,452	4,466	4,650	4,791	4,888	5,052	5,087	0.7	0.9
Retail trade	6,766	7,012	6,986	6,992	7,220	7,368	7,534	7,565	0.4	1.2
Finance, insurance, and real estate	3,144	3,255	3,308	3,320	3,378	3,443	3,518	3,627	3.1	3.0
Services	13,644	14,034	14,423	14,502	14,829	15,278	15,827	16,122	1.9	2.2
Government and government enterprise	10,934	10,959	11,184	11,621	11,382	11,626	11,963	12,311	2.9	1.3
Federal, civilian	1,414	1,448	1,471	1,500	1,512	1,562	1,595	1,598	0.2	0
Federal, military	301	314	321	320	319	331	329	326	-0.9	0.4
State and local	9,218	9,197	9,392	9,801	9,551	9,733	10,040	10,387	3.5	1.8
DERIVATION OF PERSONAL INCOME BY PLACE OF RESIDENCE										
Total labor and proprietors' income by place of work	77,818	80,796	81,371	82,331	85,043	86,947	88,191	89,765	1.8	0.8
Less: Personal contributions for social insurance by place of work	4,296	4,551	4,576	4,611	4,742	5,162	5,214	5,314	1.9	1.2
Plus: Residence adjustment	525	547	563	569	572	578	588	590	0.3	1.5
Net labor and proprietors' income by place of residence	74,048	76,792	77,358	78,288	80,874	82,363	83,564	85,040	1.8	0.7
Plus: Dividends, interest, and rent	17,350	17,946	18,756	19,612	19,909	19,960	19,941	19,956	0.1	-0.1
Plus: Transfer payments	16,532	16,813	16,992	17,084	17,210	17,939	17,844	18,049	1.1	1.4
State U.I. benefits	852	841	806	719	753	820	635	559	-12.0	-5.9
Transfers excluding state U.I.	15,679	15,971	16,186	16,366	16,456	17,119	17,209	17,490	1.6	1.6
Personal income by place of residence	107,929	111,551	113,106	114,984	117,992	120,262	121,349	123,046	1.4	0.7

SOURCE: Bureau of Economic Analysis, special release.

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Executive Compensation in Michigan: A Study in Risk-Sharing

by ALBERT D. SPALDING, J.D., *School of Business Administration, Wayne State University*

In these days of published annual salary surveys and who's-earning-what articles, the media often focus on the incomes of top executives at large corporations. And despite the fact that the same media often report multimillion-dollar ballplayer contracts and billion-dollar rock music superstars with glowing praise and reverence, there is often an innuendo that something is "wrong" when top executives are handsomely paid for their services.

What is often ignored, however, is the level of risk associated with the incomes of top corporate officers. There is not just the risk of being fired, although that risk is certainly a real one in all cases. But even more important is the risk of losing a substantial portion of compensation if corporate performance is not at the level prescribed by the boards of directors of the corporations themselves.

This article compares the level of compensation of executives in Michigan with the compensation of executives in similar situations elsewhere in the United States. The level of risk associated with that compensation is also examined, again comparing Michigan executive compensation with that of executives in companies headquartered elsewhere.

SURVEY

A survey of seventy-five publicly held corporations headquartered in Michigan was conducted. The companies ranged in sales from slightly more than $1 million per year to several billion dollars per year, but did not include the Big Three automobile manufacturers. (The automobile manufacturers were excluded because it was not possible to draw comparisons with similar companies outside of Michigan.) The group surveyed comprises more than 70 percent of the publicly held companies headquartered in Michigan. The group was subdivided by industry into eleven subgroups (table 1). As expected, the largest subgroup consisted of manufacturers of automotive components.

In addition, four hundred corporations headquartered outside of Michigan were studied. At least five corporations in each industry's subgroup were identified for purposes of comparison to each Michigan company. The exception was automotive-components manufacturers, where only three corporations outside of Michigan were studied for every Michigan company. The companies surveyed ranged from those with sales below $50 million to those with sales in excess of $500 million (table 2).

Table 1. Industry Summary

Industry Group	Number of Michigan Companies	Number of Non-Michigan Companies
Food and beverage	4	20
Construction related	6	30
High tech (computers, lasers, robotics)	8	40
Natural resources (mining, utilities)	6	30
Financial services	11	55
Manufacturers, consumer products	5	25
Manufacturers, automotive components	16	48
Manufacturers, other	8	40
Wholesalers	3	15
Retail	5	25
Other	3	72

Table 2. Summary by Sales

Sales ($ Millions)	Number of Michigan Companies	Number of Non-Michigan Companies
Less than 50	15	90
50 to 150	18	102
150 to 500	22	108
Over 500	20	100

The information relating to executive compensation was drawn from the annual proxy statements made available to shareholders and others as part of the annual meeting for each corporation. Executive compensation, for purposes of this comparison, included all compensation reported in the proxy statements. Under Securities and Exchange Commission regulations, proxy disclosure must include all remuneration, including salary, cash awards, stock units and stock equivalents, and other payments.

COMPARISON: MICHIGAN V. NON-MICHIGAN

In comparing direct compensation paid by Michigan companies and non-Michigan companies, note that compensation tends to be closely related to the annual sales of the

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company. Corporations with higher sales volumes tend to employ top executives at a higher compensation level than corporations with lower sales volumes (table 3).

For corporations with very high sales volumes (at or near the $1 billion mark), the compensation of top Michigan executives closely follows the pattern of compensation of non-Michigan executives. At the smaller companies, however, there is a widening gap between the compensation of Michigan executives and that of non-Michigan executives. The smaller the company the more pronounced is the gap.

Table 3.
Average Top Executive Noncontingent Compensation

Sales ($ Millions)	Michigan	Non-Michigan	Difference
Less than 50	$ 92,000	$126,000	$34,000
50 to 150	105,000	138,000	33,000
150 to 500	150,000	178,000	28,000
Over 500	241,000	256,000	15,000

COMPENSATION AT RISK

Smaller Michigan companies pay their top executives somewhat less than similar-sized companies elsewhere, but an even more striking difference exists between Michigan corporations and non-Michigan corporations in the area of at-risk or contingent compensation. In the case of such at-risk compensation, a company's board of directors might decide that overall corporate performance would be improved if the top executives were provided with an incentive for top performance in the form of contingent compensation. This is in contrast to salary-only compensation packages for top executives, which involve the corporate decision that top executives will make optimal decisions when their compensation is not tied to specific (and sometimes somewhat narrow) performance goals. In fact, most of the Michigan corporations surveyed include some form of risk sharing on the part of top executives with respect to their overall compensation.

TYPES OF AT-RISK COMPENSATION

1. Compensation Based on Corporate Stock Performance. Many Michigan corporations have developed incentive compensation plans for their top executives. By using such a plan, a company can reward an executive for his efforts in helping to increase the value of the company. The value of the company, as measured by the market price for the company's stock, becomes a measure of the executive's compensation.

Most Michigan companies that maintain incentive compensation plans make use of special provisions in the Internal Revenue Code relating to tax-qualified incentive stock options. Under such a plan, the executive is granted an option to purchase the corporate stock at a price equal to the market price of the stock at the time the option is granted. If the stock goes up, the executive winds up with a bargain in his or her hands; if the stock goes down, of course, the option has no value. In the meantime, the executive does not pay tax on the option and does not pay tax if the option is exercised. Capital gains tax is paid only when the actual stock, purchased as a result of the option, is sold.

A variation of this procedure is found in the nonqualified stock option which also provides for the future purchase of company shares of a price equal to, or perhaps below, the price of the share at the time that the option is granted to the executive. Nonqualified stock options are more flexible, because they are not subject to Internal Revenue Code rules and limitations. The executive is charged with taxable income at the time that the option is exercised; the taxable income is equal to the difference between the price actually paid for the stock at that time and the fair market value of the stock at that time.

Other forms of compensation based on stock performance, as utilized in Michigan, include stock appreciation rights, which entitle an executive to receive the equivalent of increases in market price in the form of cash rather than actual stock transactions. Similarly, phantom stock plans are used, under which Michigan executives receive awards in cash or stock based on the performance of make-believe shares of stock, as if those shares had actually been issued to the executive.

Table 4.
Percent of Companies Using Contingent Compensation

Sales ($ Millions)	Michigan	Non-Michigan	Difference
Less than 50	48.30%	22.40%	25.90%
50 to 150	59.00%	40.71%	18.29%
150 to 500	73.30%	50.58%	22.72%
Over 500	79.20%	57.60%	21.60%
Total surveyed	71.30%	49.20%	22.10%

More than 70 percent of the seventy-five Michigan publicly held corporations surveyed sponsor at least one type of long-term incentive compensation plan, as opposed to less than 50 percent nationally. The reliance on incentive compensation plans was even more pronounced in smaller Michigan companies, nearly half of whom utilized at-risk compensation plans compared to less than 25 percent at the national level.

Based on this comparison, it is clear that Michigan executives have more at stake when it comes to corporate stock performance than do their counterparts elsewhere.

2. *Compensation Based on Prescribed Standards.* Another aspect of compensation among Michigan corporate executives has been the use of annual bonus plans based on various award determinants. Under these plans, executives receive annual bonuses based on such factors as increased sales, increased profitability, increased production, increased earnings per share, and increased return on stockholders' equity for invested capital. Fifty-two percent of the Michigan publicly held corporations reported annual bonus plans, and of these, 82 percent were tied to predetermined corporate goals. Most of the time those goals were determined by a compensation committee appointed by the corporate board of directors. In some cases, the goals were included in the provisions of the employment contract of the top executives.

The use of annual bonuses based on predetermined corporate goals is more pronounced in Michigan than elsewhere. Nationally, less than half of the publicly held corporations surveyed report annual bonus plans as part of their corporate compensation programs. Of those, approximately two-thirds make use of predetermined annual financial objectives as the premise for the granting of bonus awards. This means that Michigan corporate executives, whose bonuses are often included in the annual salary surveys published by the media, show the larger percentage of their compensation at risk—based on company performance—than the national average.

(Continued on p. 8)

Tourism in Michigan

by CARRIE MURGITTROYD, *legislative analyst, and* JIM DOHERTY, *legislative intern, Michigan Legislative Service Bureau*

ECONOMIC SIGNIFICANCE OF TOURISM

Tourism and travel are becoming perceived as an important means of economic stability for a state heavily influenced by the cyclical nature of the auto industry. Because recreation is a strongly established basic need of human beings and is engaged in even during times of heavy unemployment, such as recessions of the 1970s and 1981-82, the state's recreation and tourism industry continued to be a strong contributor to the economy.

The following tables represent data compiled by the Michigan Travel Bureau showing the economic significance of travel. Table 1 shows the total economic impact of travel and tourism efforts in Michigan during the period from 1978 to 1985. As seen in Table 1, the economic impact has grown from $7.4 billion per year to $12.6 billion. However, when adjusted for inflation, the figures show a decline in total economic impact during years of recession and actual growth in the past few years. Jobs have remained somewhat constant from 269,000 in 1978 to 281,000 in 1985 with a fall and subsequent rise in between those years. Table 2 shows that in actual dollars state tax revenue generated from tourism grew from $344.4 million in 1978 to $582.2 million in 1985. Figures adjusted for inflation show a rise from $344.4 million in 1978 to $350.9 in 1985.

Because the total economic impact of travel is devised according to multidimensional estimates, including the number of nights that people spend in Michigan during a vacation and average amount a tourist spends per day, it is almost impossible to compare these total figures with manufacturing, agriculture, and other industries. However, tourism is commonly acknowledged as one of the three most important activities in Michigan, joining manufacturing and agriculture. As shown in Table 3, the average expenditure of a tourist each day has risen from $44 to $76 in the past eight years. Table 3 also shows that the number of people traveling on overnight trips in Michigan has risen from 96.5 million in 1978 to 97.5 million in 1985.

RECREATIONAL AND TRAVEL RESOURCES

Michigan, known as the summer vacation destination of the lower midwest since early in the twentieth century, has now become a year-round destination for millions of people pursuing a wide range of travel and recreational activities. The expanding natural, urban, and cultural resources are keys to understanding the significance of travel experiences.

The sheer geographic expanse of the state indicates a range of topographic variation attracting bikers, motorists, and bus travelers and supporting an abundant fish and wildlife population. These natural resources serve as a base for a wealth of travel attractions, including state parks, travel information centers, and privately owned accommodations and supply businesses.

Urban travel activity is an important component of the industry. The Detroit metropolitan area is the most significant urban travel destination in the state with a wealth of urban resources and attractions. While much urban travel is concentrated in southeastern Michigan, the state's other urban centers are popular travel destinations as well.

The diverse heritage of the state's population has given way to a wide range of ethnic and cultural events and attractions. Other attractions center around historical significance or the manufacturing industry. The travel in the state also includes many winter activities, such as snowmobiling, ice fishing, downhill skiing, and cross country skiing. With the wide range of travel resources, Michigan can accommodate the traveler in many forms, fashions, and in all seasons. It is this fact that has bolstered tourism and travel in the state.

Table 1. Economic Impact of Tourism in Michigan, 1978-85

Year	Dollars generated (billions) Nominal	Real[1]	Jobs (000)
1978	7.4	7.4	269
1979	8.0	7.1	252
1980	8.9	7.0	249
1981	9.6	6.8	244
1982	9.8	6.7	240
1983	10.5	7.0	253
1984	11.4	7.4	263
1985	12.6	7.6	281

SOURCE: Michigan Travel Bureau, special release.
1. Inflation adjusted with 1978 = 100.

Table 2. State Tax Revenue Generated by Michigan Travel, 1979-85 (millions of dollars)

Year	Nominal	Real
1978	344.4	344.4
1979	369.0	326.5
1980	410.0	321.1
1981	442.8	315.2
1982	451.0	308.7
1983	487.9	327.5
1984	524.8	338.6
1985	582.2	350.9

SOURCE: Michigan Travel Bureau, special release.

Table 3. Average Expenditure Per Day and Number of Nights of Travel Activity of Tourists in Michigan: 1978-85

Year	Expenditure per day[a]	Millions of person nights[b]
1978	$44.00	96.5
1979	50.00	90.3
1980	56.00	89.2
1981	61.00	87.8
1982	63.00	86.2
1983	66.00	90.2
1984	71.00	93.8
1985	76.00	97.5

SOURCE: Michigan Travel Bureau.
a. Amount shown is unadjusted for inflation and is average amount spent per person per day.
b. Person nights is representative of the number of people traveling on overnight trips.

PROMOTION, RESEARCH, AND INDUSTRY DEVELOPMENT

Travel promotion in Michigan takes place at the state, regional, metropolitan, and local levels. In 1982, this multilevel system of travel promotion was drawn together under

the state sponsored "Say Yes to Michigan" campaign. Recognizing the need to set the tone of recovery from the recession in the late 1970s and early 1980s, to strengthen the tourism industry generally, and to successfully compete with other states' promotional efforts, a comprehensive campaign was initiated. This campaign receives annual appropriations in the state budget with funds being divided to promote agriculture, product development, economic development, and tourism efforts. Although the state theme was officially changed in 1984 to "Yes, MICHIGAN," the support for an umbrella approach to promoting tourism and travel in the state remained.

As early as the 1920s with the development of four regional tourist associations (RTAs), public and private sector representatives began actively cultivating the growth of tourism and travel in the state. The four RTAs are the Upper Peninsula Travel and Recreation Association, the East Michigan Tourist Association, the Southeast Michigan Travel and Tourist Association, and the West Michigan Tourist Association. They are nonprofit organizations coordinating and representing regional grass roots industry needs and objectives. Regional tourist association members currently participate in state and national travel organizations, contribute to a huge supply of printing and advertising, and lobby for legislation benefiting travel industries.

Formal state level involvement in the travel industry began in 1945 with the passage of 1945 PA 106, which established the Michigan Tourist Council. The Tourist Council was formed to coordinate the regional promotion efforts of the RTAs, thus projecting an overall image of the state as a desirable destination for vacation and recreation. One representative from each of the RTAs served on the Tourist Council along with five other industry representatives appointed by the governor. The arrangement remained in place until the early 1970s.

In 1973 the Tourist Council was transferred to the Department of Commerce from what was then known as the Department of Conservation. (The Tourist Council had originally been housed in the Department of Agriculture until 1966.) In 1975, PA 145 was passed amending 1945 PA 106, replacing the Tourist Council with the Michigan Travel Commission and the Travel Bureau. According to law, the Michigan Travel Commission and Travel Bureau were established to "enhance the economic viability of the state through development, improvement, and promotion of the travel, tourism, and convention industry of the state."

The Travel Commission consists of thirteen members. They are the secretary-managers of the four regional tourist associations and nine members to be appointed by the governor, with the advice and consent of the Senate, four of whom are selected from the membership of the Michigan Association of Convention and Visitors Bureaus, and five public members who are experienced in the field of travel. The commission is a policy making body which develops guidelines on marketing, promotion, and advertising strategies and sets the priorities for implementation by the Travel Bureau.

The Michigan Travel Bureau maintains an approximate staff of thirty and has a total budget of $11.2 million for fiscal year 1985-86, including approximately $5 million from "Yes, MICHIGAN" allocations. Of this total, over $4 million is utilized for advertising and promotion, and $6.8 million is used in the General Fund with an extra $1.4 million of that amount earmarked specifically for development in Michigan's sesquicentennial efforts. Another $600,000 will be utilized specifically for the development of the Olympic Training Center in Marquette. The Travel Bureau divides its energies into three major areas, including promotion of the state at various trade shows, mass media advertising and communication, and information services.

Members of the Travel Bureau staff responsible for promotion recruit for and participate in the domestic and international travel shows. Boating, vacationing, sporting, bus tour, and general travel shows are attended by staff each year to market the activities in the state. Staff members also serve as liaisons assisting in the development of promotion and marketing strategies for communities around the state. Special projects are identified and undertaken to attract both national and international attention to Michigan as travel and vacation destinations. Recent projects include attracting conventions such as the 1980 National Republican Convention, the National Automobile Association of America Annual Convention, the Inc. 500 Conference (500 fastest growing companies in America), and most recently, the Society of American Travel Writers. Such projects aim at reaping long-term benefits for the state as industry representatives relay their positive travel experiences in Michigan to potential travel consumers.

The adveristing and communication efforts of the Travel Bureau include a wide range of activities. Publicity through paid advertising is a major component. By contracting with a private advertising agency, advertising campaigns are designed to enhance each season's attractions, projecting an image of the state as a year-round vacation and travel destination. The advertising campaigns are concentrated in the prime market areas of Michigan, Illinois, Indiana, Ohio, Iowa, Minnesota, and Wisconsin. The Travel Bureau staff works in a variety of other capacities promoting and marketing various segments of the industry. News releases, feature stories, and promotional paragraphs are developed and distributed to be published in magazines and newspapers in and out of the prime market area. Furthermore, the Travel Bureau began publishing *Michigania* in 1982, a quarterly newsletter of the Michigan travel industry. The publication includes an update of Travel Commission and Travel Bureau activities, seasonal travel data, and reports on past and upcoming events.

The information services are an important function of the Travel Bureau, serving both consumer and industry needs. Travel inquiries received by mail, phone, or in person are answered by Travel Bureau staff. A twenty-four-hour toll-free telephone system was developed in 1981 to handle hundreds of thousands of phone inquiries each year. A computerized system known as "Trips" (travel information processing system), initiated in 1982, provides information to the potential consumer, and logs and relays requested information to private businesses via the corrresponding regional tourist association. The system enhances the efficiency in providing consumer information and serves to formulate a data base for the private sector.

In terms of travel industry development, the Travel Bureau provides grant and basic data support for development projects. Communities receive financial and/or data support for such projects as festival and hotel development. In this

way the state promotes the development of the industry, looking for new ways to expand the economic viability of tourism and travel.

The United States Travel Data Center and the United States Census Bureau have been major sources of national travel data and market information. But with the increased emphasis on obtaining updated and readily available regional market information, the state is developing its own research resource base. This effort will enhance national data and also reduce the dependence on national reports published every three to four years. In this regard, the state, in contract with Ross Roy Advertising Agency, initiated a quarterly telephone survey in October of 1984. Known as the "Great Lakes Travel Monitor" and still in the process of computation, the results of this survey will contain a wealth of statistical information aimed at emphasizing definitive target markets. The final computerized data will be divised according to and made accessible by market segment profiles which include various traveler characteristics such as income range, driving time distance from Michigan, specific activity of interest, or several other groupings or tabulations.

Given the increased state competition for tourism and travel dollars, the goal of statewide research efforts is to compile the information needed to develop tailored promotional and marketing campaigns. Sources of information have traditionally included state park camping activity, highway traffic counts, sales and use tax data, newspaper and university reports, various private sector surveys such as Chamber of Commerce reports, Mackinac Bridge crossing counts, and numbers of delegates attending major convention facilities. The Travel Bureau also has a working relationship with Michigan State University. The university has recently established a tourism and travel recreation resources clearinghouse designed to serve as a data base for the tourism and travel industry in the state.

THE COMPETITION

Michigan is one of the top ten states in the nation when it comes to benefiting from the impact of travel. In recent years, as competition has become fierce among states for the all-important tourist dollar, more and more state governments have increased budget appropriations for travel promotion and advertising and have added catchy slogans to their campaigns. Although the "Yes MICHIGAN" advertising campaign was one of the earliest promotion efforts in the midwest to gain popularity, other states quickly caught on. Some of the familiar slogans include "Ohio, the Heart of it All," "Wander, Indiana," and "Escape to Wisconsin." These slogans appeal to a diverse range of people and were proven successful after New York's "I Love New York" and Virginia's "Virginia is for Lovers" campaigns attracted a wealth of attention.

These slogans and accompanying advertising schemes are developed, for the most part, under the direction of state travel offices, of which forty-eight states and five United States territories have an official state or territorial government bureau or division responsible for travel promotion and development. In Hawaii and Maine, privately run, nonprofit organizations maintain responsibility for travel programs.

The United States Travel Data Center in Washington, D.C., prepared a survey, the "Survey of State Travel Offices," in 1983-1984. The results of this survey show that the total travel office budget in the average state or territory grew fifteen percent in fiscal year 1983-84, a substantial increase when compared to fiscal year 1982-83 when travel offices reported virtually no growth in their budgets. Most of this increase was directed towards advertising. Other results of the survey, including Michigan's position, are summarized below.

- Forty-six states or territories (including Michigan) report having a continuing travel data gathering program. These programs usually involve counts and surveys of welcome center visitation and/or motor vehicle counts, collection of data on travel-related business receipts, and visitation at state facilities and private attractions.
- Forty-three state or territory travel offices have a public relations or press information officer. Most state travel offices indicate that their public relations officer directs the majority of publicity to out-of-state audiences. However, Michigan reports a major portion of advertising is directed at in-state travelers. Michigan, like the majority of states, also publishes a travel-related newsletter.
- Michigan, like forty-five other states or territories, utilizes the services of a private advertising agency. Also in forty-five states including Michigan, groups outside of state government such as travel-related businesses and regional travel organizations cooperate on advertising programs. Thirty-seven states or territories offer matching fund programs for groups that cooperate on advertising programs. Michigan has such a program, with funding going equally to four regional tourist associations.
- Forty-six states or territories conduct press or travel writer tours. Michigan conducted approximately twenty-five in 1983, the year of the survey.
- Forty-five states or territories currently have a special travel promotion theme or slogan. Several states actually have more than one slogan, using a specific one for different advertising media.
- Eleven states or territories report operating a total of fifteen out-of-state information centers. Michigan did have one of these centers in Chicago, but has since closed it. The state does operate centers in Belgium and Japan, however, with only seventeen other states operating foreign offices, although many states do budget for foreign advertising.
- Thirty-four states or territories have one or more toll-free telephone numbers for travel information inquiries. Michigan has two toll-free lines operated by the Michigan Travel Bureau. One line is a recording of seasonal information, the other to answer questions for Michigan vacationers.
- Forty-five states or territories annually hold some type of state travel conferences. In Michigan, this is known as the Governor's Annual Conference on Tourism.

A large indicator of the intense rivalry among states for capturing travelers can be demonstrated by comparing state budget figures. Every state in the Great Lakes region has increased state funding for travel promotion in recent years—some dramatically. For Michigan, a state which gains most of its travel income from residents within the state, losing citizens to attractions in neighboring states because of increased advertising is a critical issue.

Michigan's total Travel Bureau budget in fiscal year 1983-84 was approximately $6.9 million. The Great Lake State ranked sixth in the nation for the amount of money spent that year. In comparison to other states in our region, Michigan ranked first for that year with Iowa spending $500,000.

Indiana spending $1.1 million, Wisconsin spending $2.0 million, Illinois spending $3.4 million, Minnesota spending $3.9 million, and Ohio spending $4.4 million. Since that time however, Michigan has lost its standing to Illinois, which increased its budget to $14.4 million for 1984-85. Moreover, Ontario annually outspends each of the states in this region by spending approximately $23.4 million annually. The total dollars aligned against us from competition in the Great Lakes region has increased forty-seven percent in two years to about $76 million for 1984-85.

In addition to this large amount of competition from other states, there are cities that spend more than the State of Michigan in promotional efforts. As shown in Table 4, the convention bureau of Las Vegas has a total budget of $26.9 million. Detroit, one of the top ten convention cities in the nation, also annually spends $2.1 million for its promotion.

The amount cities spend is further illustrated in the following list.

Table 4. Listing of Major Metropolitan Promotional Efforts by City and Amount

City	Amount
Las Vegas	26.9 million
Reno	6.6 million
San Antonio	5.7 million
Atlanta	4.6 million
Honolulu	4.6 million
Houston	4.4 million
Little Rock	4.4 million
Los Angeles	4.1 million
San Francisco	3.9 million
St. Louis	3.3 million
New York City	3.0 million
Philadelphia	2.9 million
Phoenix	2.5 million
Toronto	2.5 million
Dallas	2.4 million
Chicago	2.3 million
Salt Lake City	2.3 million
Cleveland	2.1 million
Detroit	2.1 million

SOURCE: Michigan Travel Bureau, 1984

Some of these cities are major attraction areas for Michiganians. However, statistics show that citizens who do travel out-of-state travel mostly beyond the surrounding region to warm weather destinations or to major resort areas like Las Vegas. Even though a considerable amount of money is spent out-of-state by Michigan's residents, most of Michigan's tourism industry is generated by its own residents. Perhaps a major reason for this is the above average income of a large proportion of Michigan residents, providing more extra income to travel long distances or to invest in a second home or summer cottage. The state's advertising program is aimed at encouraging even more Michiganians to enjoy the state's diverse range of attractions and to vacation at home.

Nonresident travelers to Michigan are made up mostly of citizens from the prime market area. This area comprises the states surrounding Michigan and Ontario. In 1981, a Family Opinion, Travel and Tourism Study was conducted by National Family Opinion Service (NFO) for the Michigan Departments of Commerce, Transportation, and Natural Resources. This study involved a survey completed by thousands of residents of Michigan and the prime-market region.

Much information was culled from this survey, including a breakdown of the regions of Michigan most often visited by travelers, where most out-of-state travelers came from, and the reasons why people vacationed in Michigan. These results are shown in the following tables. Table 5 demonstrates where out-of-state residents visit when they travel to Michigan. As shown, geographic proximity is an important factor in determining where overnight visitors travel in Michigan. For example, the greatest percentage of Ohio travelers to Michigan spend time in the northeastern lower peninsula and the southeastern lower peninsula while travelers from Minnesota, Wisconsin, and Iowa most often visit the western Upper Peninsula. As shown, 37.2 percent come from Illinois and St. Louis, 25.3 percent come from the Ohio and Kentucky region, 20.3 percent come to Michigan from Indiana and Lousiville, and approximately 17.1 percent come from Minnesota, Wisconsin, and Iowa. Table 6 shows the main reasons why people choose to come to Michigan. The reasons are that it is peaceful and quiet, is a place to enjoy family fun because friends and relatives live here, and because Michigan has beautiful scenery.

LEGISLATION AND ISSUES

Because a large percentage of visitors to Michigan mentioned the beautiful scenery, communing with nature, and peace and quiet when listing reasons for traveling to Michigan, it is apparent that the protection of natural resources plays a vital role in tourism efforts. Legislation is fundamental in this protection effort and in the promotion of Michigan. Tourism has obvious ties to several areas of legislative importance, such as the business community which provides the attractions; the criminal justice community, which makes Michigan a safe place to travel; the transportation industry, which ensures the accessibility of attractions; and many others.

Recognizing the importance that state legislation can have to the tourism industry, the Michigan Legislature named standing committees to deal specifically with tourism issues over thirty years ago. The committees were then known as the House and Senate Committees on Tourist Industry Relations and have since evolved to become the current Senate

Table 5. Breakdown of Nonresident Overnight Trips to Specific Michigan Areas by Prime Market Region (in percentages)

Prime Market Region	Western U.P.	Eastern U.P.	North Western L.P.	North Eastern L.P.	South Western L.P.	South Eastern L.P.	Total MI
MN, WI, IA	51.4	28.9	10.1	17.3	10.4	13.4	17.1
IL, St. Louis	41.2	23.7	35.4	26.0	45.0	29.6	37.2
IN, Louisville	2.8	25.0	30.0	16.2	26.9	16.4	20.3
OH, Cinn. (KY)	4.5	22.4	24.2	40.5	17.6	40.6	25.3

SOURCE: Family Opinion, Travel and Tourism Study, National Family Opinion Service, 1981.

Table 6. Why Nonresident Visitors from the Michigan Region Selected a Specific Area as Their Main Destination for Michigan Overnight Trips***

Reason	Western U.P.	Eastern U.P.	North Western L.P.	North Eastern L.P.	South Western L.P.	South Eastern L.P.	Total MI
Easy to get travel into	8.8	14.7	9.3	14.6	4.0	8.2	8.5
Peace and quiet	36.3	45.6	44.8	34.1	30.9	8.7	28.0
Night life and entertainment	5.6	2.9	6.4	3.0	3.6	6.4	4.3
Uncrowded	30.6	32.4	23.8	19.5	17.1	2.7	16.3
Friendly people	26.3	17.6	38.4	25.6	23.9	16.7	23.0
Lots of things to do	18.8	17.6	24.4	38.4	15.6	16.4	20.0
Overall reasonable prices	16.9	25.0	20.9	13.4	12.4	6.6	13.8
Good hotels and motels	3.8	13.2	5.2	22.0	4.1	6.6	7.0
Good restaurants	6.9	11.8	9.9	17.1	5.6	8.4	8.5
Family fun	44.4	45.6	44.8	34.1	39.4	29.2	37.0
Commune with nature	34.4	45.6	32.6	31.1	16.8	5.0	20.2
Close by place to go	13.8	10.3	4.7	15.2	20.2	10.5	14.0
Package plan available	6.9	0.0	7.6	6.7	2.1	2.7	3.8
Vacation worth the cost of gas	26.3	35.3	26.7	29.3	20.2	15.3	21.9
Meeting new and interesting people	7.5	4.4	9.3	5.5	4.7	5.7	5.4
Romance	8.1	1.5	8.7	5.5	4.1	2.7	4.2
Vacationing	55.6	54.4	45.9	53.0	31.1	22.1	37.3
Always go there	26.9	27.9	38.4	22.6	23.2	12.8	22.1
Popular distination	10.0	5.9	15.1	23.8	5.3	6.6	8.9
Good population	12.5	11.8	24.4	29.9	8.9	9.4	13.0
Never been there	20.0	29.4	11.6	34.1	9.0	13.0	16.3
Friends and relatives live there	41.9	26.5	39.0	26.2	49.3	59.6	45.4
For a get away weekend	25.0	2.9	13.4	15.2	27.1	20.5	21.3
Have a second home there	10.6	11.8	9.3	2.4	8.3	0.7	6.1
For beautiful scenery	53.8	58.8	58.1	55.5	26.0	6.2	32.6
Good place for water recreation	16.3	25.0	45.9	28.7	26.4	5.0	21.8

*This information is from the trip detail portion of the questionnaire and is biased toward longer trips. Percents add to more than 100 because respondents were asked to check all that apply.

**The prime market area, including the states of Wisconsin, Minnesota, Iowa, Illinois, Indiana, Ohio, and the cities of St. Louis, Louisville, and Cincinnati.

SOURCE: Family Opinion, Travel and Tourism Study, National Family Opinion Service, 1981.

Committee on Economic Development and Tourism and the House Committee on Tourism and Recreation.

In its responsiveness to the needs of the tourism industry, the legislature has recently dealt with issues ensuring sand dune protection, water diversion, and the expansion of the convention business. Other current issues involve the deposits on wine cooler bottles, uniform school starting dates, and the creation of a Michigan Department of Recreation, Tourism, and Culture.

INDUSTRIES OF THE FUTURE

Research findings indicate several trends which point to the future expansion of the lodgings, restaurant, and other tourist-related industries in the United States and in Michigan. According to demographers, the eighty million people born after World War II (baby boomers) will play a major role in this expansion. Baby boomers have been the primary market focus in a wealth of promotion efforts, from baby products in the 1950s to the teenage trappings of the 1960s to the furnishings of young marrieds in the 1970s. In 1980-1990, the major marketing thrust will be targeted at people who are now in their early middle years, who are at the peak of their careers, and who represent the highest earning capacity for most adults. In the decade from 1990-2000, this group of adults will be at a time in their lives when their children are older and when they are suddenly more free to indulge in travel. Some will retire early, causing an unusually large number of retired people in the population. These citizens represent a substantial growth market for travel, leisure activities, and luxuries.

Coupled with this explosion of retirees and middle aged citizens will be the affluent singles who are younger but who are very successful in the professional world. Moreover, by the year 2000, it is predicted that 60 percent of all married women will be in the labor force. These sociological and demographic changes represent a dramatic rise in the amount of discretionary income available to a large percent of the population. Not only will it increase the demand for leisure time activities, it will also lead to the need for different types of vacations—a more "affluent" vacation. Senior citizens will continue to be mobile, young professionals will be spending more time flying to plush resorts, and places of employment will be offering more recreational resources in response to the continued focus on the importance of good health.

The educational field has already begun to respond to the increased demand for travel professionals. The United States Bureau of Labor Statistics reports that job openings for travel agents alone will rise more than 40 percent in the next decade. In addition, entry level positions in the industry (including such jobs as ski instructors, restaurant personnel, or reservation clerks) as well as middle and upper management positions (including hotel management, recreational direction, and public relations) will all increase dramatically. Even though schools are expanding their courses in travel-related studies and a few colleges and universities are offering bachelor's and master's degrees in travel and tourism, many more changes in education are looming on the horizon.

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3. Unfunded Deferred Compensation. A third type of risk shared by Michigan corporate executives is the risk of future payment of promised deferred compensation. Unlike pension-plan benefits and other retirement-plan benefits funded through the use of corporate trusts and retirement-plan assets, unfunded deferred compensation includes all types of promises by the employer to pay future benefits out of company assets. The risk shared by the executive is the chance that the company will not be viable in the future or that it will not have the necessary cash in order to meet the future obligations.

Unfunded deferred-compensation obligations arise in two forms. First, many Michigan employers provide for equalization of pension benefits when those benefits are limited by the Internal Revenue Code. For example, Section 415 of the Internal Revenue Code limits the amount of retirement-plan benefits that may be funded through tax deductible dollars. To the extent that top executives would otherwise have a larger benefit than the Section 415 limitations, corporate employers often make up the difference with a promise to pay it out of corporate assets.

Second, most Michigan corporations have deferred-compensation agreements covering one or more top executives. These agreements, which may be in the form of separate employment contracts, officer-wide deferred-compensation plans, or specific plans covering categories or groups of corporate executives, provide for payment of retirement benefits or other deferred benefits. Those future benefits may be based on bonus awards, voluntary deferrals of executive salaries, or other arrangements.

In the first category, more than 64 percent of the Michigan employers whose top executives would be affected by the Internal Revenue Code limitations have been provided with equalization plans by their employers to be paid out of company assets. This compares to a national average of more than 80 percent. On the other hand, a much higher percentage of Michigan corporations have provided deferred-compensation arrangements to their top executives, such arrangements not being tied to pension plans. Nationally, approximately 49 percent of all publicly held corporations reports some form of deferred compensation for one or more of its executives. In Michigan, the percentage is well over 50 percent for such private arrangements. This means that Michigan corporate executives generally defer income more often, and it also means that such deferral of income places that income at the mercy of the future performance of the corporation.

WHY MORE RISK?

When asked why Michigan corporations placed their executives at a higher degree of risk with respect to their compensation then elsewhere, several top executives summarized the reasons as follows:

1. The Michigan economy tends to be more cyclical than the regional economies in other areas of the United States. By making executive compensation somewhat contingent upon sales and profits, corporate compensation committees force those executives to take counter measures in order to prevent a corporate echo of the overall Michigan economy.
2. The cyclical nature of the Michigan economy also requires careful corporate financial strategies. By tying executive compensation to net profit, an incentive is in place to prevent slow responses to downswings in the economy.
3. There is simply less acceptance among Michigan corporations of the idea that top executives will not just do their best and that such natural optimization of executive functions takes place in the absence of self-interest.

CONCLUSION

If size of company is the primary determinant of compensation of top executives, then company growth would emerge as a top priority. When that phenomenon is tempered by the marriage of other corporate performance goals with incentive compensation at the highest levels, however, it can be argued that corporate performance will more likely be optimized. That is the theory accepted by Michigan corporations, at least to a larger degree than elsewhere.

The headlines may list the salaries and overall compensation of top executives. What is not stressed is the extent to which a significant portion of that compensation is tied to successful corporate accomplishments. In Michigan, to a larger degree than elsewhere, at-risk compensation plays an important role in determining the level of compensation of top executives.

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Enterprise Zones: Michigan's Newest Redevelopment Program

by GARY SHIELDS, *graduate assistant, Bureau of Business Research, Wayne State University*

For the past three decades, billions of dollars have been poured into American cities in the hope of reversing economic decline. Yet in most places the decline has continued and high levels of unemployment and poverty remain. This distress is particularly evident among minority groups and the poor. Many people have moved out of the cities (see Table 1), leaving behind municipalities with shrinking tax bases and crumbling infrastructures. Reductions in federal aid put further strain on the cities, causing them to increase taxes and eliminate services, thus leading to further out-migration and decay.

Given this loss of middle- and upper-income taxpayers as well as the migration of businesses and jobs, the federal government has responded with a series of "targeting" aid efforts, such as Urban Development Action Grants (UDAG), job training programs (e.g., CETA), Community Development Block Grants, and various programs of the Small Business Administration. State and local governments have also responded to the crisis with funding for training and retraining, industrial park development, and tax abatements. The cost effectiveness of these policies is still being debated. Proponents argue that the condition of the cities would now be much worse had it not been for the direct intervention of these programs. Those opposing direct aid cite the potential for political manipulation of the development funds and the lack of efficiency in distributing the moneys.

Table 1. City Population Changes, 1970–1980

City	Population (in thousands) 1970	1980	Percentage change
Baltimore, MD	905	787	-13
Boston, MA	641	563	-12
Buffalo, NY	463	358	-23
Chicago, IL	3,369	3,005	-11
Cincinnati, OH	454	385	-15
Cleveland, OH	751	574	-24
Detroit, MI	1,514	1,203	-21
Milwaukee, WI	717	636	-11
New Orleans, LA	593	558	- 6
Philadelphia, PA	1,949	1,688	-13
Pittsburgh, PA	520	424	-18
St. Louis, MO	622	453	-27
San Francisco, CA	716	679	- 5
Seattle, WA	531	494	- 7
New York, NY	7,896	7,072	-10
Honolulu, HI	325	365	+12
Houston, TX	1,234	1,595	+29
Jacksonville, FL	504	541	+ 7
Memphis, TN	624	646	+ 4
Phoenix, AZ	584	790	+35
San Antonio, TX	654	786	+20
San Diego, CA	697	876	+26

SOURCE: U.S. Bureau of the Census, *1985 Statistical Abstract*, Table 26; change calculations by author.

Many states have not waited for final resolutions to these questions. They have gone forward and established enterprise zones by putting together various incentive packages to encourage economic development in distressed areas and by combining several of the benefits listed above and adding a few new wrinkles to their existing development programs. In January 1986, legislation was enacted in Michigan that will enable the city of Benton Harbor to become the first enterprise zone in the state. Some of the provisions of this new legislation include:[1]

1. Business tax credits equal to the tax liability attributed to qualified business activity in the enterprise zone;
2. Local property tax exemption allowances;
3. Encouragement of local government commitments to increase levels of road improvements and maintenance, police protection, transportation and other services;
4. Encouragement of flexibility in application and enforcement of local ordinances relative to zoning, construction, and safety in order to streamline requirements on entrepreneurs, employers, and employees;
5. Encouragement of local units to provide land use and planning resources to private entities.[1]

Currently there are more than 1,400 zones in over 660 jurisdictions throughout the United States (Exhibit 1).[2] Proposed federal legislation offering additional incentives to firms operating in enterprise zones could spur further growth of these areas. Although a relatively new concept, numerous claims are already being made about the effectiveness of the zones in halting the decay of urban areas and providing

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Michigan Economic Indicators

Item	Year previous of latest month	Previous month	Latest month
Manufacturing workers			
Average weekly hours, Michigan	42.9	43.2	43.2 (Mar.)
Average weekly hours, U.S.	40.4	40.2	40.7 (Mar.)
Average hourly earnings, Michigan ($)	12.62	12.88	12.85 (Mar.)
Average hourly earnings, U.S. ($)	9.45	9.68	9.70 (Dec.)
U.S. motor vehicle production (units)	1,042,429	993,380	952,350 (Mar.)
Electricity usage (mil. kwh.)			
Michigan	6,469	6,360	6,686 (Jan.)
United States	201,364	197,107	209,102 (Jan.)
Raw steel production			
Michigan (000 net tons)	574	595	574 (Jan.)
United States (000 net tons)	6,984	6,728	7,666 (Jan.)
Consumer price index (1967 = 100)			
Detroit area	310.9	322.9	320.0 (Mar.)
United States	316.1	327.6	326.0 (Mar.)
U.S. producer price index (1967 = 100)	308.7	304.7	300.3 (Mar.)
Michigan farm prices received index (1977 = 100)	111	111	121 (Mar.)

SOURCE: U.S. Bureau of the Census; U.S. Bureau of Labor Statistics; Michigan Crop Reporting Service; Ward's Automotive Reports; American Iron and Steel Institute; and Energy Information Administration.

Permit Authorized Construction in Selected Counties, First Four Months, 1985 and 1986

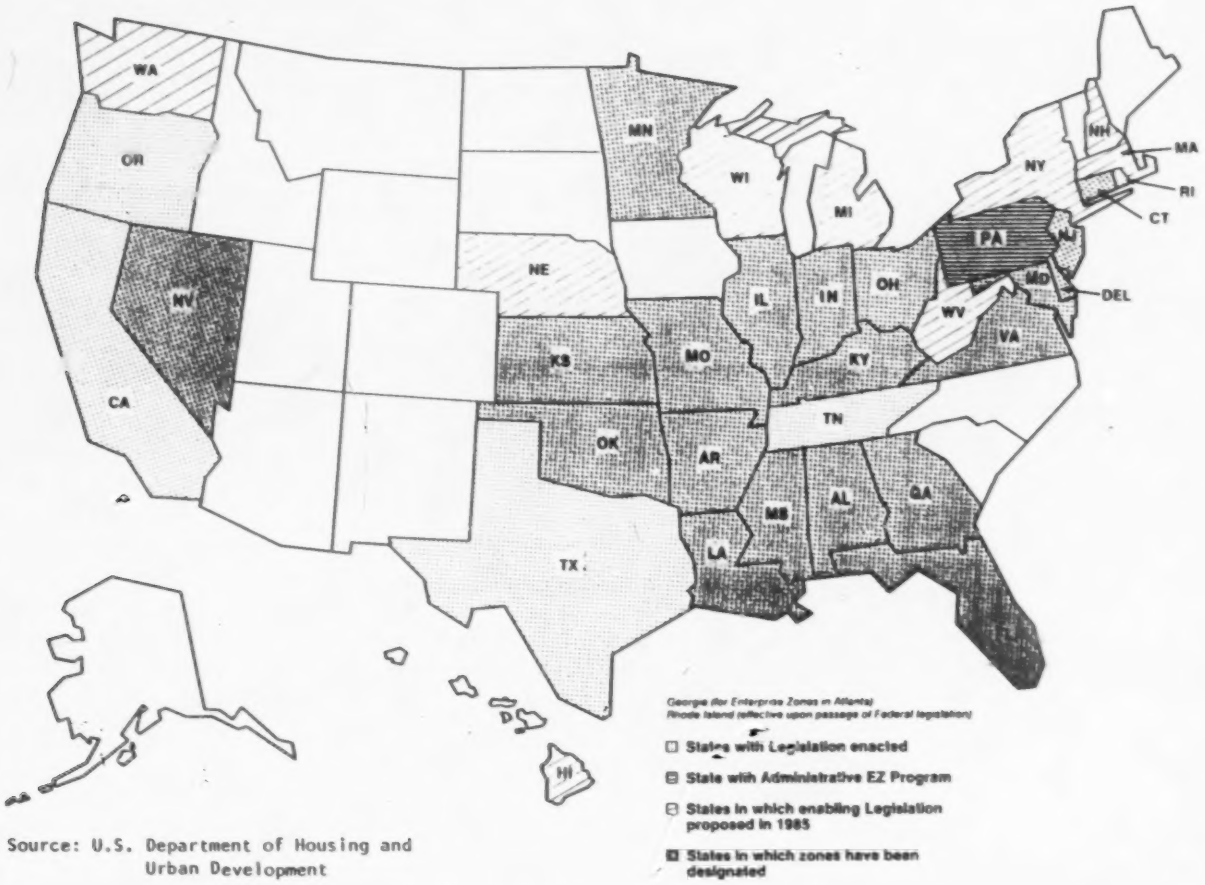
(Thousands of dollars)

	Residential		Industrial		Office		Mercantile	
	1985	1986	1985	1986	1985	1986	1985	1986
Allegan	427	1,060	0	395	0	0	0	141
Antrim	1,105	1,296	17	212	0	0	17	195
Berrien	1,112	769	0	9	0	385	0	189
Clinton	2,034	3,314	38	195	46	0	155	314
Emmet	1,178	953	0	0	79	0	0	0
Genesee	7,125	11,540	1,423	2,454	768	1,295	2,290	3,833
Grand Traverse	3,433	6,076	315	294	550	261	200	254
Ingham	10,970	20,563	43	4,580	612	10,774	696	1,872
Jackson	552	2,297	205	0	75	50	200	11
Kalamazoo	10,395	17,846	169	326	4,787	4,515	1,175	2,012
Kent	30,061	48,433	10,944	7,967	5,061	7,295	2,454	6,416
Livingston	7,342	13,766	1,275	1,795	0	0	405	123
Macomb	43,598	73,783	12,512	16,439	3,029	2,303	5,738	12,167
Midland	2,187	3,619	0	0	975	133	5	206
Muskegon	1,998	2,132	0	150	0	732	934	320
Oakland	130,132	182,567	44,532	19,982	92,161	63,102	6,650	6,172
Ottawa	16,340	24,928	1,360	6,823	913	450	1,022	1,898
Saginaw	642	1,710	63	0	245	155	10	530
St. Clair	4,296	5,049	653	853	380	1,003	121	11
Washtenaw	9,999	25,241	1,247	2,895	535	4,914	1	1,194
Wayne	46,658	64,362	91,493	17,857	6,928	5,891	21,812	17,398
MICHIGAN	369,759	561,504	168,803	92,463	118,047	104,852	47,438	59,718

SOURCE: Bureau of the Census, special release.

State Enterprise Zone Legislation

EXHIBIT 1



Source: U.S. Department of Housing and Urban Development

jobs to the unemployed. Strong support of the concept from the present Reagan administration promises to keep enterprise zones in the limelight for many more years. This article discusses the basic ideas underlying enterprise zones and summarizes some of the initial results of zone implementation in other states. Primary emphasis will be given to urban enterprise zones since Benton Harbor's early experiences will probably more closely parallel these areas than zones established in rural settings.

DEVELOPMENT OF THE CONCEPT

The origin of the enterprise zone concept is generally credited to Peter Hall, an urban planning expert at Reading University in England. His idea, "Freeport," was intended "as a last-ditch solution to urban problems . . . most appropriate to inner city areas that are largely denuded of people, or alternatively areas with very grave social and economic problems."[3] The idea was picked up in 1978 by a British Conservative Party member, Sir Geoffrey Howe, who established the term "Enterprise Zone" and moved the legislation through Parliament. Two government bills—the Local Government Planning and Land Act and the Finance Act—were passed into law in November 1980. There are now twenty-five zones operating in the United Kingdom.

In the United States, a leading proponent of enterprise zone development has been Stuart M. Butler of the Heritage Foundation. There have been several attempts to pass legislation at the Federal level, including bills by Representatives Jack Kemp and Robert Garcia in 1980 and 1981,[4] the Reagan bill of 1982,[5] and the Enterprise Zone Community Development and Employment Act of 1984,[6] introduced by Representatives Alan Wheat and Les Aspin. The thrust of this federal effort has been an attempt to expand on state and local benefits in such areas as:

- eliminating capital gains taxes on zone investments;
- providing additional investment tax credits;
- insuring that small issue industrial development bonds will continue to be available within zones;
- employee personal income tax credits;
- employer payroll credits for hiring disadvantaged workers;
- employer tax credit carryovers.[7]

Federally designated zones would have fairly long lives with some provisions for extension. Twenty-five years has been a frequently proposed life span. Most plans also envision a competitive federal program with federal selections based on need and strictly limited in number. Clearly, not all state zones would qualify for similar federal designation and benefits under such limitations. To date there has been no

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federal legislation signed into law. However, as of 20 February 1986, twenty-seven states had adopted some form of the enterprise zone concept.

THE CASE FOR ENTERPRISE ZONES

With the wide array of existing development incentives, it is natural to question the need for another such program. Perhaps part of the reason for adding enterprise zones to this list lies in the perceived failure of previous measures to halt the decay of inner cities. Supporters of this view see enterprise zones as a different sort of development vehicle. Rather than targeting specific companies and negotiating incentive packages on a case-by-case basis, enterprise zones seek to indirectly spur growth by creating environments free of government controls. This "supply-side" orientation rests on the belief that tax cutting stimulates growth, leading to a larger tax base, stabilized or increased tax revenues, and increased employment. From this perspective it is easy to see why the concept of enterprise zones has such strong support from the Reagan administration.

Enterprise zone philosophy is much more than simple tax reductions, however. Central to the idea of the enterprise zone is that of business and job creation as opposed to commercial transfer. Nearly all zone backers agree that legislation should be directed at *creating* activity and employment in depressed economic areas, rather than encouraging existing firms and existing jobs to relocate within the enterprise zones. Firms already operating within the zone will also find it profitable to expand production and hiring, again producing profit and employment where before there was none. Since enterprise zones are to be located in areas of poverty, typically populated with low-skill workers, zones should be geared toward that labor market with labor-intensive operations in "lower-tech" manufacturing and service industries. It is also felt that emphasis should be given to promoting small firms in the enterprise zones since small business historically has provided the bulk of employment in this country, has been more receptive to hiring low-skill workers, and usually has been more active in creating new jobs.

This emphasis on small business development is a primary element in the job creation strategy proposed for most enterprise zones in this country. Current research does in fact suggest that this is the best path to follow to reach increased employment goals. Contrary to some popular beliefs, large corporations do not produce new jobs at anywhere near the same rate the small business sector does, and recent trends continue to indicate that this will be the case for future job creation. In fact, between 1979 and 1984, total U.S. employment rose by 6.3 million, yet employment at the Forbes Sales 500 firms, a group of large, diverse companies, *lost* 1.7 million jobs. On the other hand, small business generated nearly two-thirds of all the new jobs during the period and accounted for nearly 40 percent of the U.S. gross national product.[8] Although a high percentage of small businesses fail, many others survive and grow. The problem, as many enterprise zone proponents see it, is that we have placed too many governmental barriers in the path of small business. Firms that start out small and grow and those that fail are not being replaced by other small businesses, especially in the inner cities. An expert on small business, David Birch of the Massachusetts Institute of Technology, studied the job creation process extensively and concluded that job replacement, not job loss, is the key to halting decline. His examination of over 5 million private sector enterprises showed a remarkably consistent job-loss rate across all regions of the country and between the cities and the suburbs. The difference between the growing and the declining regions and cities was how fast jobs were being replaced and created. Development strategies aimed at saving employment by reducing the loss rate were futile.[9] These results imply that Benton Harbor would be better off in the long run by directing its efforts towards creation of new businesses, rather than helping existing, marginal firms survive the short run or attempting to lure large firms into the zone. Small firms typically operate with a shortage of capital which forces them to use lower-level, less-expensive technology—just the kinds of firms that can employ low-skill, inner-city workers. This is also consistent with labor forecasts for the upcoming decade which show the great majority of new jobs being created in the service industries, not the high-capital manufacturing sectors. In recognition of the difficulties that small firms have in obtaining capital, some enterprise zone legislation has incorporated provisions to allow individuals and companies to take income tax credits on funds invested in zone enterprises.

Beyond these basic goals for enterprise zones, some planners see numerous opportunities for experimentation. Stuart Butler advances suggestions for a whole range of additional features which enterprise zones might try to incorporate, such as elimination of the minimum wage, insurance pooling, relaxed zoning rules to allow for mixed use of the land, streamlining of building codes, phasing out of rent control, foreign trade zones, reverse income taxes, and privatization of city services.[10] Although states have yet to attempt anything beyond basic, tax-focused enterprise zones, the additional possibilities for zones have served to attract positive attention to the idea as well as increased opposition from such groups as the AFL-CIO. The political implications embodied in enterprise zone philosophy have become major barriers to the passage of federal legislation to date.

An important advantage that zone supporters see in enterprise zone legislation lies in the perceived nature of the tax reduction/abatement provisions granted by governmental units. Instead of direct outlays to specific businesses in the form of grants, tax abatements require no direct expenditures. The cost of such reduction programs begins to accrue in the form of foregone revenue only after economic development takes place. Reduced taxes encourage firms to start up and expand operations in the zones, increasing property values and employment. In the long run, tax reduction agreements will expire and municipalities will enjoy greater revenues due to the expanded tax base and increased employment levels. Thus, the initial cost of the program is virtually nothing, since there was nothing there to begin with, and the short-term revenue loss due to tax concessions will be more than offset by future benefits to the community, including increased tax collections and fewer transfer payments for such items as unemployment and welfare.

OPPOSITION TO ENTERPRISE ZONES

Objections to enterprise zone proposals have been strong in some cases. This is particularly true at the federal level and partially explains the lack of a federal program to date

despite strong support from the Reagan administration. One of the most frequently heard criticisms of the zone concept goes back to the tax reduction features present in most legislation. Several reasons are offered. First, opponents fear that the "supply-side" of tax base enlargement will not come true. Tax reductions and abatements will become subsidies to companies (mostly large companies) and lost revenues to the municipalities. In light of recent federal revenue sharing cutbacks, cities and states can ill afford to gamble present resources on a theory of future gain.

This position has recently been strengthened with the release of a report by the Citizens Research Council of Michigan. In this study of Michigan economic development incentives, tax rates and tax abatements were compared to economic growth in eighty-two of the largest state business-tax-base jurisdictions during the years 1974-83. Their conclusion was that despite the large size of Michigan's abatement programs (38% of all new construction during the period received abatements), a "significant amount of economic development would have taken place without the benefit of a tax abatement."[11] If true, these abatements cost Michigan governments between $153 million and $159 million in lost tax revenues during the ten years. Of course, if the abatements did succeed in attracting firms that would have located elsewhere, state revenues were instead enhanced by the abatements.

An extension to this tax reduction argument further challenges enterprise zone theory. This criticism points to a growing body of research summarized in testimony before the House Committee on Ways and Means in 1983 by Marc Bendick, an economist at the Urban Institute: "the major determinant of where firms are located are not tax incentives but instead are considerations of business efficiency."[12] Efficiency factors such as general wage levels, transportation costs, availability of raw materials, and location of markets play much more important roles than do tax rates according to these studies. Local governments have little control over such factors and granting tax reductions is, at best, a weak and costly development strategy. Firms taking advantage of the tax benefits would probably have already decided to locate in or near the zone and would simply reap the tax concessions as a windfall gain.

While this line of logic has been receiving increased attention, it is also clear that at least some businesses do consider tax levels at some point in their location decision process, particularly when the other factors are equal, or when several alternate locations are being considered within the same geographic region. Enterprise zone promoters also emphasize gearing tax benefits to small start-up firms rather than large existing or transfer companies. This lowers the cost of start-up for new firms while discouraging firms merely seeking tax havens.

The cost of starting an enterprise is another concern that zone opponents feel is not addressed in most legislation. Since most small businesses do not earn profits initially, income tax reductions have little effect on their ability to survive the first few crucial years. Firms that are losing money are not going to be paying taxes—with or without enterprise zones. Making the tax credits nonrefundable does not help fledgling firms either. Limiting the tax benefits to corporate income also ignores other major components of small business, such as sole proprietorships and nonprofit organizations, often the ones needing help the most. Although the avowed goal of enterprise zones is the creation of small business firms, tax policies in most legislation will actually aid large, profitable companies.

Responding to these potential problems, zone supporters stress the need for flexibility at the local level, allowing each community to customize zone benefit packages to fit specific local needs and goals. Also proposed are low ceilings on corporate income eligible for tax credits to discourage tax havens and allowances to individuals for offsetting personal income with zone investments to reduce their personal income taxes. Allowing individuals tax breaks will create a flow of private capital into distressed areas, eliminating the need for public expenditures such as UDAG. As Butler points out, this policy would be similar to current tax treatments of S corporations.

The final series of reservations regarding enterprise zones touches upon several nontax questions—gentrification and displacement of zone residents, subsidized competition for nonzone border firms, and monitoring of the zones. An important problem that is still being debated is the ability of the zones to create employment for zone residents. Since zones are placed in areas of high unemployment and poverty, with the explicit goal of reducing both, most state legislation has incorporated employer incentives for hiring and training disadvantaged zone workers. The effectiveness of such incentives is questionable, however. As Bendick and others have observed, past tax credit programs have not changed business hiring practices significantly, especially with respect to hiring disadvantaged workers. Few companies actually claim the credits, and when they do, it is for workers they would have hired anyway, without the credits.[13] It is not clear if this problem can be addressed with current legislation, even with the addition of federal employment benefits to the state programs.

SOME EARLY RESULTS

Since the concept of enterprise zones originated in England, Great Britain was also first to actually designate and operate zones in 1982. Today twenty-five such zones exist in the United Kingdom. Similar in design to many American zones in areas such as property tax relief and capital expenditure tax credits, the British zones are, however, quite different from their U.S. counterparts in many other features. An important difference between the two is that the central government reimburses local units for abated property taxes ("rates") in the United Kingdom. No such refund occurs in the United States, which leads to the "lost revenue" criticism discussed previously. U.K. zones also tend to emphasize development of large-scale commercial and industrial facilities, whereas American zones focus, in theory at least, on small business. Several other features of the British model, such as nonintegration of zone activities into the surrounding neighborhoods and the use of a different land-use planning system, should be taken into account when evaluating U.K. results and when comparing their enterprise zones to U.S. zones. Still there are some preliminary data being released from Great Britain that are of interest to U.S. planners, particularly in urban areas.

- In the first three years, firms in the initial eleven zones have created over ten thousand jobs, half of which were in new firms.

- Reduction in administrative planning controls has not led to a deterioration in standards within the zones.
- Property tax reductions and capital allowances have proven to be very popular with firms and developers.
- Many added jobs (perhaps 75%) in the zones were transfers, not newly created jobs.
- Some of the fiscal advantages of the zones have been offset by higher land prices. It is estimated that half the capitalized value of the incentives have been consumed in this way, though higher land prices did have a beneficial effect in some cases.[14]

Interestingly, this last result was noted in 1984 by Benjamin Hawkins[15] in his analysis of the proposed Reagan zone legislation, yet current literature seldom mentions the issue. If this effect would occur in U.S. zones, it could put a serious damper on small business growth in the zones since rising land prices would increase the cost of starting a business. Firms already existing in the zones might find it more profitable to sell out to larger firms seeking to enter the zone for the other tax advantages, resulting in fewer small zone businesses.

American enterprise zones have been in operation even less time than the British zones, so the results must be considered tentative. An additional problem in analyzing U.S. zones is that, unlike the British, we do not have a uniform national policy on zones. In the absence of federal guidelines, each state has set its own requirements for zone designation and its own package of incentives. Further variety is obtained by allowing local governments latitude in developing their own sets of procedures and benefits. Thus, within the state of Illinois, for example, the city of Chicago exempts zone firms from paying a real estate title transfer tax, but ten miles away in Chicago Heights, no such exemption is offered. Comparisons become difficult under such diverse conditions.

The variety of state and local programs also leads to definitional problems when evaluating and comparing enterprise zones. Ohio, which sets state certification requirements for business employment in zones, specifies in legislation exactly what is considered a "new employee" and an "unemployed person." Illinois, which does not set state requirements for hiring in zones, uses no such guidelines. Their annual report on zone performance is based on information supplied by each zone individually. It is not clear if all twenty zones count "jobs created" in the same fashion. A particularly troublesome measurement is job retention. Nearly all studies attempt to gauge how effective enterprise zones are by how many firms and, therefore, jobs decide to remain in the zones because of zone benefits. The near impossibility of measuring something that did not happen makes the data on "jobs saved" tenuous. Consequently, most research relies on the opinions of public officials for retention estimates. Just how close these jobs were to being lost then becomes a judgment question, potentially subject to bias. Also, while all zone programs attempt to determine how many new jobs are created, very few keep track of the jobs that are lost despite zone benefits. While this is consistent with the zone philosophy of job turnover, calculating *net* job creation would give a more complete picture of what is actually happening in the zones.

One of the first major research studies of U.S. enterprise zones was published in 1983 by the nonprofit Sabre Foundation. Their research covered eighty-six active zones in nine states, with an average operational age of slightly less than nine months. Despite the relative newness of most of the zones, Sabre was extremely positive about the early results: "The message is clear: enterprise zones are delivering results."[16] Major findings of their study included:

1. Direct employment impact on over 20,000 jobs—8,686 jobs created and/or saved in the zones, 8,477 jobs planned for addition by zone firms, and 3,108 jobs planned by firms applying for zone designation.
2. Zone benefits helped stimulate over $450 million in private investment within the zones for new construction, expansions, and renovations.
3. The majority of economic growth came from company startups and expansions, rather than from relocations.[17]

These results should be interpreted carefully with the previously mentioned limitations. The category of "jobs saved" was again dependent on the opinions of public officials, for instance. In some states, businesses are not required to meet any employment quotas before receiving zone benefits, so that the statistics for planned jobs are also open to interpretation. The great majority of Sabre's findings though were quite encouraging for zone proponents.

The Sabre study also attempted to go beyond simple tabulations to answer other critical questions. Responding to the charge that zones do not generate new businesses, local officials in the study felt that zone benefits played a key role in over half of all new ventures within the zones. Sabre also concluded that the large number of startup firms, typically unprofitable for the first few years, meant that revenue losses for governmental units would be minimized. Of course, this also means that allowing income tax credits as a zone benefit would also be less effective.

A more recent study of enterprise zones was conducted in 1985 by the U.S. Small Business Administration. Their study focused on eight urban zones in eight different states, utilizing both information gathered at local levels and Dunn and Bradstreet data. Here again it was found that most employment growth in the zones came from existing small businesses, while large firms continued to show declining or stagnant employment. In two of the eight zones employment losses outnumbered gains. However, the number of business concerns operating had increased in all cases. In at least some zones this increase was greater than expected, given the overall improving economic climate after 1982 throughout most of the country.[18] The SBA study also found that an important factor in determining the employment makeup of the zones was the degree of local participation in the marketing of the zones. This effect was frequently noted in the field investigations done by Wayne State's Bureau of Business Research as well.

A third major examination of enterprise zone results has just been completed by the U.S. Department of Housing and Urban Development. HUD acknowledged the difficulty of gathering objective data about the state programs, but issued a generally favorable report on the zones included in their study. Eighteen specific instances were identified where firms canceled relocation plans due to zone benefits. In the ten HUD zones, over seven thousand jobs were reported as created or retained, and over $147 million had been invested in the areas since their creation.[19] Beyond the tangible monetary benefits, HUD also found that zone designation

encouraged private investment by demonstrating local government commitment to the area. This supports the view mentioned earlier of enterprise zones as areas of favorable business climate rather than specific sets of policies. Tax reduction continues to be the primary emphasis of most programs, with capital assistance, deregulation, and neighborhood revitalization playing relatively minor roles.

The HUD report further examined how businesses reacted to zones by concluding that zone benefits were *not* the primary location decision factors for a majority of zone firms but did affect growth decisions among firms already established in the zones. HUD agreed with SBA in finding a small business emphasis in most new zone activity, but it also found that "few representatives of zone firms could identify all incentives offered in the enterprise zone or reliably distinguish between economic development incentives specific to the zone and those available more generally."[20] The great majority of firms interviewed in preparation for this article, including companies already located within zone boundaries, also were unaware of zone benefits.

One other HUD assessment with a potential bearing on Benton Harbor was the view that enterprise zones often served as catalysts for small- and medium-size cities to develop systematic economic planning programs. In addition, zones permit cities to establish closer links to individual businesses than was previously possible. Several zones require each firm to bargain directly with local governments for zone designation and benefits which could serve to improve communication between the two groups. Large cities, on the other hand, tend to incorporate zone programs into their existing overall development strategies.

The Bureau of Business Research at Wayne State University has just completed a series of field interviews with public officials and businesspersons in four urban enterprise zones in other industrial states. Generally, most participants within the zones were in favor of the programs, though several respondents mentioned major difficulties in meeting mandated zone-resident hiring requirements. Rapid turnover of zone employees frequently compounded this problem. In several cases zone boundaries had not provided an adequate labor pool from which to draw employees, especially skilled and semi-skilled workers. Rarely did firms take advantage of available job-training tax credits.

Similar to the HUD findings, most new zone businesspeople said that zone benefits were not the primary reason they chose to locate in the zones. Hoped for deregulation had still not occurred and most owners and managers complained of an increasing red tape burden. As HUD also noted, awareness of zone benefits appeared very low throughout the business communities interviewed. The most frequently mentioned method of learning about enterprise zones for participants was indirect, word-of-mouth conversations with other businesspeople. This lack of knowledge was especially pronounced among the smallest of the firms interviewed.

A frequently heard criticism of the UDAG program—political favoritism—cropped up in several instances with zone participants who felt that some businesses had sufficient influence to gerrymander zone boundaries. One zone respondent did acknowledge using similar leverage in negotiating a tax reduction from the city government. Other companies attempted to change their zone commitments after receiving zone benefits. Several firms also felt the attractiveness of the zone was diluted somewhat by the availability of some benefits to firms outside the zone. Finally, some public officials expressed definite negative opinions on the political nature of tax abatements. One official compared abatements to a poker game, with local governments competing against each other for businesses and the abatements as the ante each must put up in order to play the game. The issue of tax abatements as a development tool is still far from being settled.

CONCLUSIONS

Although it is still too early to predict final outcomes, enterprise zones do appear to offer some limited benefits as development tools for cities. Results from zones currently in operation seem modestly positive, though the problem of measuring results accurately remains unresolved. While zone benefits have not been the primary reasons for new business location decisions, they have played at least a secondary role in borderline cases and are frequently cited by zone firms planning expansions. Problems remain in the marketing and promotion of the zones, as well as with matching the labor pool of zone residents to the needs of local business. Political implications of zone benefits such as tax abatement continue to be a concern in both the public and private sectors. Enterprise zones do, however, offer the opportunity for closer working relationships and coordination between government and industry. The Benton Harbor experiment should offer many more insights into enterprise zones in the months ahead.

NOTES

[1] Michigan, Enrolled Senate Bills Numbers 95 and 100, Acts #224 and #226 (1985).

[2] U.S. Department of Housing and Urban Development, *Enterprise Zone Update*, 20 February 1986.

[3] Speech to the Royal Town Planning Institute, 15 June 1977. Excerpts reprinted in Stuart M. Butler, *Enterprise Zones: Greenlining the Inner Cities* (New York: Universe Books, 1981), 97.

[4] H.R. 3824, S. 1310.

[5] H.R. 6009, S. 2298.

[6] H.R. 6182, H.R. 6373.

[7] "Enterprise Zones," *Congressional Digest*, May 1985, 137.

[8] James Cook, "The Knack . . . and How to Get It," *Forbes*, 24 March 1986, 58-59.

[9] David Birch, *Job Creation in Cities*, in Butler, *Enterprise Zones*, 79.

[10] Butler, *Enterprise Zones*, 152-57.

[11] Citizen's Research Council of Michigan, *Municipal Government Economic Development Incentive Programs in Michigan*, February 1986, 31.

[12] "Enterprise Zones," *Congressional Digest*, May 1985 147.

[13] Ibid.

[14] Michael B. Gahagan, "Enterprise Zones in the United Kingdom," excerpt of a talk given to the American Bar Association, 10 July 1985, cited in U.S. Department of Housing and Urban Development, *Enterprise Zone Notes*, September 1985, 2-4.

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[15] Benjamin M. Hawkins, "The Impact of the Enterprise Zone on Urban Areas," *Growth and Change*, January 1985, 38-39.
[16] Gerald Bonetto and Dick Cowden, *Enterprise Zone Activity in the States* (Washington, D.C.: Sabre Foundation, 1983), 1.
[17] Ibid.
[18] Susan A. Jones, Allen R. Marshall, and Glen E. Weisbrod, *Business Impacts of State Enterprise Zones*, (Cambridge: Cambridge Systems, Inc., 1985), iii.
[19] U.S. Department of Housing and Urban Development, *Case Studies of State-Designated Enterprise Zones*, December 1985, i.
[20] Ibid, X.

Per Capita Personal Income for Michigan and Metropolitan Areas: 1979–1984

Area	1979	1980	1981	1982	1983	1984
Ann Arbor	10,376	11,261	11,973	12,294	13,219	14,670
Battle Creek	8,796	9,418	10,217	10,550	11,014	11,729
Benton Harbor	7,919	8,474	9,250	9,663	10,280	11,149
Detroit	10,315	10,880	11,454	11,781	12,589	13,943
Flint	9,590	10,171	10,990	10,826	11,862	13,181
Grand Rapids	8,797	9,284	10,134	10,509	11,267	12,385
Jackson	8,322	8,793	9,610	9,839	10,395	11,166
Kalamazoo	9,079	9,854	10,764	11,022	11,907	12,817
Lansing-East Lansing	8,851	9,493	10,233	10,600	11,520	12,325
Muskegon	7,649	8,219	8,872	9,175	9,578	10,498
Saginaw-Bay City-Midland	8,732	9,304	10,001	10,137	10,863	11,757
MICHIGAN	9,239	9,798	10,451	10,742	11,481	12,621

SOURCE: Bureau of Economic Analysis, Regional Economic Information System, special release.

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County Income Patterns

by DAVID I. VERWAY, *director, Bureau of Business Research, School of Business Administration, Wayne State University*

Huron led Michigan counties in earnings growth between 1983 and 1984. Agriculture and durable-goods manufacturing were the leading growth sectors in the tip of the Thumb area of Michigan. Missaukee County in the northern part of the lower peninsula was second, largely because of agriculture. Extraordinary growth in farming and the manufacture of both durable and nondurable goods placed Ionia County, east of Grand Rapids, in third position. Agriculture and manufacturing propelled another Thumb county, Sanilac, to fourth place in earnings growth between 1983 and 1984. Fifth in growth was Ottawa County. Services, agriculture, and nondurable-goods manufacturing were the stimuli in this western Michigan county.

This analysis is based on data recently released by the Bureau of Economic Analysis. The BEA is a division of the U. S. Department of Commerce; analysts there also are responsible for the preparation of Gross National Product (GNP) figures for the nation. There are no county data comparable to GNP because of the difficulty in determining where to assign profits and certain other items in the financial accounts of companies that do business in more than one location.

Labor and proprietors' earnings by county are compiled from reports that employers file with the state agencies that administer unemployment insurance programs and through tax returns filed with the Internal Revenue Service. The figures are comprised of wages and salaries of blue- and white-collar workers, plus other labor earnings, plus proprietors' earnings. The latter are what is left from revenues after deducting labor cost, rent, cost of goods sold, and other expenses of operating unincorporated farms, family restaurants, TV repair shops, law offices, and other businesses. Data of gratuities, income in kind (for example, free restaurant meals for employees), workers' compensation, and other minor items included in other labor earnings, are developed

Table 1. Ranking of Michigan Counties According to Growth in Labor and Proprietors' Earnings, by County in Which Earned: 1983–84

County	Percentage change 1974–84	1983–84	County	Percentage change 1974–84	1983–84	County	Percentage change 1974–84	1983–84	County	Percentage change 1974–84	1983–84
Huron	61	28	Oceana	67	11	Otsego	184	15	Leelanau	38	7
Missaukee	82	24	Saginaw	94	11	Allegan	122	14	Bay	73	7
Ionia	100	24	Montcalm	115	11	Tuscola	52	14	Cheyboygan	97	7
Sanilac	55	23	Oscoda	56	11	Lake	57	14	Van Buren	72	6
Ottawa	179	21	Chippewa	24	10	Gratiot	58	14	Charlevoix	105	6
Hillsdale	103	21	Montmorency	56	10	Newaygo	112	14	Ingham	147	6
Alcona	123	19	Wayne	59	10	Genesee	128	13	Jackson	68	6
Cass	113	19	Crawford	117	10	Ogemaw	119	13	Calhoun	77	6
Barry	91	18	Keweenaw	-6	10	Kalkaska	287	13	Luce	116	6
Menominee	117	18	Alpena	81	9	Shiawassee	77	13	St. Clair	109	5
Macomb	109	18	Mecosta	105	9	Muskegon	89	13	Houghton	107	5
Antrim	74	18	Dickinson	96	9	St. Joseph	114	13	Branch	89	4
Grand Traverse	192	18	Alger	87	9	Lenawee	68	12	Gogebic	47	3
Oakland	168	17	Kalamazoo	131	9	Washtenaw	164	12	Schoolcraft	100	2
Clinton	116	17	Baraga	65	8	Kent	138	12	Midland	103	2
Presque Isle	78	16	Berrien	59	8	Arenac	75	12	Iron	93	0
Eaton	111	16	Isabella	121	8	Osceola	91	11	Ontonagon	-24	-2
Wexford	142	16	Mackinac	106	8	Lapeer	107	11	Monroe	100	-7
Mason	86	16	Manistee	106	8	Roscommon	126	11			
Livingston	174	15	Emmet	115	8	Clare	118	11	Michigan	99	12
Gladwin	111	15	Iosco	86	7	Marquette	98	11	United States	139	11
Benzie	110	15	Delta	91	7						

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

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from a variety of sources. Together, labor and proprietors' earnings represent people's compensation for working. The statistics in Table 1 pertain to the recipient's place of work, as opposed to place of residence, inasmuch as they were developed largely from employer reports.

Two counties experienced declining earnings between 1983 and 1984. Detroit Edison's troubled Fermi Two nuclear, electric-generating plant is located in Monroe County, causing declining earnings in construction and public utilities. Ontonagon County, home of the White Pine Copper Mine, has experienced declining earnings due to the worldwide copper glut.

Table 2. Ranking of Michigan Counties According to Earnings in Durable-Goods Manufacturing as a Percentage of Total Labor and Proprietors' Earnings: 1984

County	Percentage 1974	Percentage 1984	County	Percentage 1974	Percentage 1984
Genesee	52.72	56.60	Grand Traverse	6.89	17.14
Saginaw	46.54	48.02	St. Clair	20.76	17.13
Montcalm	37.27	43.89	Oscoda	(D)	16.89
Macomb	46.47	43.75	Arenac	14.05	16.88
Muskegon	43.17	40.54	Tuscola	17.35	16.50
Cass	40.04	39.11	Calhoun	24.82	15.44
Berrien	44.66	38.35	Baraga	22.04	13.56
Ottawa	39.16	38.05	Oceana	7.14	11.99
Ionia	27.35	36.97	Emmet	14.91	11.77
Wayne	38.06	36.82	Cheybcygan	13.93	11.74
Washtenaw	37.00	36.70	Isabella	6.57	11.44
St. Joseph	37.71	33.60	Lapeer	14.79	11.40
Ingham	29.70	32.71	Keweenaw	29.25	11.10
Lenawee	40.96	32.54	Delta	21.98	9.78
Menominee	33.94	32.47	Benzie	(D)	9.56
Branch	28.33	31.85	Ontonagon	5.96	7.98
Barry	44.68	31.44	Gogebic	20.33	7.89
Hillsdale	36.57	30.81	Roscommon	7.04	7.84
Alpena	26.30	30.24	Chippewa	1.29	6.69
Shiawassee	26.98	29.92	Clare	8.91	6.67
Kent	28.50	28.31	Newaygo	5.09	6.39
Monroe	31.61	27.90	Missaukee	1.86	5.71
Oakland	31.19	27.73	Schoolcraft	3.96	4.24
Jackson	33.33	27.52	Houghton	5.86	4.08
Bay	29.66	26.82	Alger	5.90	3.65
Wexford	26.12	25.39	Mackinac	3.53	2.15
Alcona	(D)	24.81	Leelanau	3.60	2.04
Huron	14.99	24.41	Marquette	2.06	1.38
Iron	12.41	24.35	Midland	0.93	0.74
Clinton	18.27	22.67	Charlevoix	32.84	(D)
Antrim	32.97	22.50	Crawford	14.58	(D)
Mason	24.92	22.14	Iosco	8.08	(D)
Eaton	28.26	21.88	Kalkaska	(D)	(D)
Dickinson	17.77	21.85	Lake	(D)	(D)
Gladwin	19.01	21.30	Luce	6.82	(D)
Livingston	19.96	21.08	Mecosta	5.91	(D)
Allegan	23.38	19.58	Montmorency	22.18	(D)
Sanilac	15.90	19.13	Ogemaw	18.63	(D)
Osceola	28.80	18.52	Otsego	25.05	(D)
Gratiot	13.89	18.42	Presque Isle	2.38	(D)
Van Buren	24.79	18.32			
Kalamazoo	20.30	17.64	Michigan	34.76	33.21
Manistee	15.01	17.54	United States	16.84	15.10

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.
(D) Withheld to avoid disclosing data for individual companies.

Table 3. Ranking of Michigan Counties According to Percentage Change in Labor and Proprietors' Earnings in Durable-Goods Manufacturing: 1983–84

County	Percentage change 1974–84	Percentage change 1983–84	County	Percentage change 1974–84	Percentage change 1983–84
Grand Traverse	626	126	Sanilac	87	16
Benzie	(D)	99	Arenac	110	16
Huron	163	64	Kent	136	15
Antrim	19	54	Wayne	53	14
Roscommon	152	50	Lapeer	59	13
Oscoda	(D)	47	Alpena	109	12
Chippewa	540	46	Jackson	39	12
Alcona	(D)	41	Kalamazoo	100	12
Leelanau	-22	39	St. Joseph	91	11
Mason	66	39	Berrien	37	11
Oceana	180	38	Emmet	70	11
Ionia	170	38	Montcalm	153	10
Wexford	135	36	Clare	63	10
Dickinson	141	35	Houghton	44	10
Missaukee	460	35	Isabella	285	10
Allegan	86	31	Branch	113	9
Oakland	138	27	Bay	56	9
Cheboygan	66	27	Schoolcraft	114	7
Clinton	169	27	Calhoun	10	6
Gladwin	137	27	Ingham	172	6
Livingston	190	27	Monroe	77	6
Gratiot	109	26	Iron	278	1
Osceola	23	26	Mackinac	26	- 2
Cass	109	25	Ontonagon	2	- 6
Menominee	108	25	Baraga	1	- 7
Eaton	63	25	Marquette	33	-11
Macomb	97	25	Gogebic	-43	-14
Shiawassee	97	24	Delta	-15	-19
St. Clair	72	23	Charlevoix	(D)	(D)
Van Buren	27	22	Crawford	(D)	(D)
Washtenaw	162	22	Iosco	(D)	(D)
Hillsdale	71	21	Kalkaska	(D)	(D)
Newaygo	166	20	Keweenaw	-64	(D)
Muskegon	77	19	Lake	(D)	(D)
Tuscola	45	18	Luce	(D)	(D)
Lenawee	34	18	Mecosta	(D)	(D)
Saginaw	100	17	Montmorency	(D)	(D)
Alger	16	17	Ogemaw	(D)	(D)
Ottawa	171	17	Otsego	(D)	(D)
Genesee	145	16	Presque Isle	(D)	(D)
Barry	34	16			
Manistee	141	16	Michigan	90	17
Midland	63	16	United States	114	13

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.
(D) Withheld to avoid disclosing data for individual companies.

The top five growth counties during the 1974-84 period were Kalkaska, Grand Traverse, Otsego, Ottawa, and Livingston. Kalkaska was Michigan's fulcrum of petroleum activity during the heyday of the oil boom. Traverse City in Grand Traverse County is the financial-commercial hub of northern Michigan. Gaylord, Otsego County, is the major stopover for people traveling north on Interstate 75. Ottawa County hosts manufacturers of office furniture and fixtures, which, along with other durable-goods manufacturing, comprises nearly two-fifths of the economy. The county also has experienced outstanding growth in services, nondurable-goods manufacturing, and the broad group of industries known as finance, insurance, and real estate since the mid-1970s.

Table 4. Ranking of Michigan Counties According to Percentage Change in Labor and Proprietors' Earnings in Service Industry Establishments: 1983–84

County	Percentage change 1974–84	1983–84	County	Percentage change 1974–84	1983–84
Ottawa	284	41	Ionia	103	9
Menominee	190	38	Kalamazoo	221	9
Cass	255	35	Branch	99	8
Kalkaska	301	25	Dickinson	(D)	8
Baraga	77	25	St. Clair	152	8
Keweenaw	(D)	23	Wexford	193	8
Otsego	261	20	Mackinac	102	8
Newaygo	162	18	Shiawassee	114	8
Missaukee	122	18	Cheyboygan	71	8
Alger	72	18	Gogebic	163	8
Mecosta	178	16	Tuscola	125	8
Antrim	(D)	16	Benzie	(D)	7
Eaton	209	15	Iosco	139	7
Montmorency	298	14	Calhoun	119	7
Chippewa	159	14	Houghton	151	7
Oakland	258	14	Washtenaw	241	7
Barry	175	13	Mason	128	7
Macomb	185	13	Iron	(D)	7
Alcona	118	13	Leelanau	86	7
Muskegon	157	13	Wayne	110	6
Osceola	120	13	Emmet	185	6
Sanilac	141	12	St. Joseph	127	6
Oceana	133	12	Oscoda	109	6
Midland	225	12	Hillsdale	118	6
Lake	-2	12	Huron	110	5
Roscommon	174	11	Clinton	183	5
Berrien	118	11	Crawford	193	5
Kent	190	11	Grand Traverse	199	4
Genesee	152	10	Monroe	142	4
Marquette	219	10	Gladwin	155	3
Livingston	289	10	Alpena	95	3
Saginaw	155	10	Delta	126	2
Montcalm	144	10	Bay	140	2
Manistee	108	10	Arenac	207	1
Lapeer	156	10	Luce	(D)	0
Isabella	228	10	Ogemaw	88	-6
Ingham	171	10	Jackson	(D)	(D)
Allegan	147	10	Ontonagon	(D)	(D)
Lenawee	111	9	Presque Isle	(D)	(D)
Van Buren	124	9	Schoolcraft	(D)	(D)
Clare	186	9			
Gratiot	101	9	Michigan	163	10
Charlevoix	130	9	United States	210	12

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.
(D) Withheld to avoid disclosing data for individual companies.

Jobs as well as residents have moved from Detroit to the suburbs, making Livingston and Oakland counties Michigan's fifth and sixth in economic growth between 1974 and 1984. Washtenaw County was seventh. Oakland and Washtenaw also are Michigan's high technology leaders. Growth in Ingham County was led by durable-goods manufacturing, where General Motors is Lansing's leading private-sector employer. The area also benefits from being the seat of state government, as well as home to Michigan State University. Growth in nondurable-goods manufacturing was responsible for Wexford's placing ninth during the ten-year period. Kent county was tenth. Grand Rapids in Kent County is Michigan's second-largest city and thus the second most important financial-commercial hub. It also hosts the headquarters of several of the world's leading designers and fabricators of office furniture and fixtures. A major overhaul of the downtown area has made the "Queen City" a leading convention and business-travel center.

Ontonagon and Keweenaw counties had shrinking economies between 1974 and 1984. Keweenaw is Michigan's smallest in terms of economic size and also one of its most remote. The declining fortunes of the mining industry in the Upper Peninsula (UP) have had an indirect effect on this peninsular area. The next eight from the bottom in earnings growth were Chippewa at the eastern end of the UP, Leelanau, a small peninsular county west of Traverse City,

Table 5. Ranking of Michigan Counties According to Earnings in Service Industry Establishments as a Percentage of Total Labor and Proprietors' Earnings: 1984

County	Percentage 1974	1984	County	Percentage 1974	1984
Emmet	28.13	37.24	Macomb	9.66	13.44
Crawford	23.03	31.13	Delta	11.24	13.28
Oakland	20.00	26.75	Oscoda	9.88	13.23
Leelanau	18.99	25.59	Oceana	9.24	12.89
Gogebic	12.90	23.11	Roscommon	10.5	12.80
Keweenaw	(D)	22.29	Monroe	10.38	12.57
Grand Traverse	20.38	20.91	Mecosta	9.21	12.48
Arenac	11.87	20.80	Huron	9.58	12.46
Otsego	16.26	20.67	Mason	10.14	12.40
Clare	15.33	20.08	Sanilac	7.97	12.37
Kalamazoo	13.95	19.43	Montmorency	4.82	12.31
Lake	30.93	19.26	Alcona	12.49	12.25
Mackinac	18.44	18.11	Genesee	10.79	11.90
Bay	12.97	18.05	Montcalm	10.36	11.78
Kent	14.70	17.94	Iron	(D)	11.76
Wexford	14.75	17.87	Cheyboygan	13.33	11.53
Wayne	13.9	17.81	Van Buren	8.76	11.40
Marquette	10.8	17.34	Ogemaw	12.73	10.96
Houghton	14.30	17.31	Lapeer	8.79	10.87
Isabella	11.64	17.25	Dickinson	(D)	10.56
Washtenaw	12.88	16.64	Clinton	7.94	10.38
Eaton	11.30	16.60	Allegan	9.27	10.36
Livingston	11.59	16.43	Missaukee	8.39	10.22
Gladwin	13.37	16.15	Alpena	9.34	10.06
Ottawa	11.65	16.06	Tuscola	6.74	9.96
Baraga	14.88	15.95	Menominee	7.42	9.92
Muskegon	11.69	15.94	Hillsdale	8.58	9.22
St. Clair	12.98	15.66	Alger	9.93	9.12
Ingham	14.26	15.65	Manistee	8.96	9.05
Berrien	11.30	15.47	Iosco	6.35	8.17
Gratiot	12.05	15.40	Kalkaska	7.71	7.98
Calhoun	12.30	15.24	Branch	7.11	7.45
Charlevoix	13.41	15.03	Ionia	7.32	7.45
Cass	8.85	14.71	St. Joseph	6.76	7.15
Benzie	(D)	14.63	Luce	(D)	6.41
Saginaw	11.05	14.50	Osceola	5.54	6.40
Lenawee	11.48	14.42	Jackson	14.26	(D)
Shiawassee	11.88	14.35	Ontonagon	2.41	(D)
Chippewa	6.75	14.15	Presque Isle	(D)	(D)
Newaygo	11.40	14.09	Schoolcraft	9.10	(D)
Midland	8.72	13.95			
Antrim	(D)	13.89	Michigan	13.26	17.52
Barry	9.49	13.66	United States	15.60	20.28

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.
(D) Withheld to avoid disclosing data for individual companies.

Gogebic, at the western end of the UP; Tuscola in the Thumb; Sanilac in the Thumb; Oscoda and Montmorency in the northeast quadrant of the Lower Peninsula; and Lake, north of Grand Rapids. Wayne and Berrien counties follow Gratiot in a tie for twelfth from the bottom in earnings growth.

In reviewing earnings data for the longer, ten-year period, it should be borne in mind that the figures are not adjusted for price changes, which eroded the gains made. The Consumer Price Index, for example, more than doubled during 1974-84. Consequently, any figure below 111 in the 1974-84 percentage change column represents a decline in real earnings. In other words, real earnings declined in all but twenty-eight of Michigan's eighty-three counties during that ten-year span.

Between 1983 and 1984 the Consumer Price Index rose by 4.3 percent. Thus, for the most recent year for which data are available, real earnings increased in all but seven of Michigan's counties.

Table 6. Ranking of Michigan Counties According to Earnings in Retail Trade as a Percentage of Total Labor and Proprietors' Earnings: 1984

County	Percentage 1974	Percentage 1984	County	Percentage 1974	Percentage 1984
Crawford	19.18	21.40	St. Clair	11.53	9.48
Clare	22.73	20.76	Barry	9.62	9.43
Roscommon	27.32	20.75	Newaygo	10.94	9.34
Ogemaw	18.67	20.47	Shiawassee	11.95	9.16
Missaukee	17.51	19.83	Macomb	8.30	9.12
Mackinac	19.86	19.79	Clinton	11.85	9.05
Cheyboygan	20.17	19.44	Muskegon	8.56	9.03
Gogebic	14.62	16.84	Marquette	9.28	8.98
Lake	16.11	16.48	Tuscola	9.93	8.95
Montmorency	16.71	16.26	Saginaw	9.17	8.90
Alcona	23.16	16.22	Alger	13.04	8.86
Arenac	16.27	15.65	Manistee	9.87	8.84
Oscoda	15.12	15.03	Monroe	11.95	8.67
Schoolcraft	16.46	14.17	Lenawee	10.16	8.59
Gladwin	16.38	13.84	Montcalm	10.99	8.58
Livingston	15.89	13.64	Sanilac	11.24	8.52
Oceana	15.74	13.60	Mason	10.56	8.50
Keweenaw	9.30	13.48	Berrien	9.66	8.43
Leelanau	10.41	13.43	Baraga	10.83	8.40
Emmet	17.31	13.42	Ontonagon	5.04	8.20
Otsego	16.07	12.88	Branch	9.46	8.15
Eaton	15.82	12.50	Ottawa	8.68	8.11
Benzie	13.29	12.43	Kalamazoo	8.79	8.09
Isabella	11.22	12.43	Huron	9.48	7.94
Gratiot	9.38	12.16	Allegan	10.30	7.89
Grand Traverse	15.93	11.89	Menominee	9.40	7.84
Chippewa	9.87	11.58	Iosco	10.76	7.78
Houghton	14.72	11.26	Charlevoix	11.32	7.74
Kent	13.57	11.11	Calhoun	8.83	7.73
Iron	14.08	11.01	Hillsdale	11.18	7.51
St. Joseph	9.88	10.73	Wayne	8.82	7.23
Oakland	11.52	10.71	Presque Isle	9.39	7.18
Bay	11.55	10.52	Osceola	9.03	7.07
Mecosta	10.90	10.29	Ingham	8.73	6.95
Van Buren	10.72	10.10	Luce	9.66	6.78
Wexford	12.31	10.02	Genesee	8.23	6.57
Dickinson	10.66	9.83	Kalkaska	16.91	6.54
Antrim	11.21	9.83	Washtenaw	8.20	5.86
Delta	14.11	9.79	Cass	9.98	5.10
Jackson	9.52	9.69	Midland	5.26	5.06
Lapeer	11.69	9.61			
Alpena	12.26	9.59	Michigan	9.70	8.56
Ionia	10.98	9.49	United States	10.37	9.57

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

Table 7. Ranking of Michigan Counties According to Percentage Change in Labor and Proprietors' Earnings in Retail Trade: 1983–84

County	Percentage change 1974–84	Percentage change 1983–84	County	Percentage change 1974–84	Percentage change 1983–84
Gratiot	104	21	Montcalm	68	7
Crawford	142	19	Shiawassee	36	7
St. Joseph	133	18	Mason	50	6
Missaukee	107	16	Midland	95	6
Marquette	92	15	Oceana	44	6
Lenawee	42	15	Calhoun	55	6
Lake	61	15	Sanilac	18	6
Ottawa	161	14	Allegan	70	6
Luce	52	13	Berrien	39	6
Oakland	149	13	Gladwin	79	6
Mackinac	105	13	Mecosta	93	6
Lapeer	70	12	Wayne	30	6
Clinton	65	12	Kalamazoo	112	6
Presque Isle	36	12	Bay	57	5
Kent	95	12	Ingham	96	5
Muskegon	99	12	Cass	9	5
Montmorency	52	11	Alcona	56	5
Alpena	42	11	Cheyboygan	90	5
Macomb	130	11	Osceola	50	4
Menominee	81	10	Baraga	28	4
Barry	87	10	Monroe	45	4
Dickinson	81	10	Iosco	34	4
Van Buren	62	10	Emmet	67	4
Wexford	97	9	Houghton	59	4
Ionia	73	9	Chippewa	45	3
Grand Traverse	118	9	Leelanau	78	3
Clare	99	9	Schoolcraft	72	2
St. Clair	72	8	Oscoda	55	2
Branch	63	8	Ogemaw	140	2
Saginaw	89	8	Delta	33	2
Livingston	135	8	Ontonagon	25	2
Hillsdale	36	8	Gogebic	69	1
Washtenaw	89	8	Kalkaska	50	1
Eaton	66	8	Antrim	52	1
Isabella	145	7	Alger	27	1
Newaygo	81	7	Charlevoix	40	1
Huron	35	7	Otsego	127	1
Genesee	82	7	Manistee	85	0
Benzie	97	7	Arenac	69	-1
Jackson	71	7	Keweenaw	37	-12
Roscommon	72	7			
Iron	51	7	Michigan	75	9
Tuscola	37	7	United States	120	10

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

SOURCES OF GROWTH

Durable-goods manufacturing led the Michigan recovery after the deep recession that ended in 1982. Consequently, counties that rely heavily on this sector had an advantage in that recovery. Genesee County is most heavily dependent on manufacturing; over half of its earnings originate in that sector, compared with a third statewide and 15 percent nationally (see Table 2). Durable-goods manufacturing in that county expanded at a rate slightly below the statewide average of 17 percent (see Table 3), but because heavy industry dominated the Flint economy, the area grew at an

Table 8. Michigan Counties Most and Least Dependent on State and Local Government; Nondurable-Goods Manufacturing; Transportation, Communication, and Utilities (TPCU); and Wholesale Trade in Their Economic Base: 1984

State and Local Government			Nondurable-Goods Manufacturing			TPCU			Wholesale Trade		
County	Growth 1983–84[a]	Dependency[b]	County	Growth 1983–84[a]	Dependency[b]	County	Growth 1983–84[a]	Dependency[b]	County	Growth 1983–84[a]	Dependency[b]
Ten Most Dependent											
Luce	3	74.74	Midland	10	56.05	St. Clair	11	15.01	Antrim	4	13.08
Mecosta	28	44.77	Alger	12	41.03	Chippewa	5	12.08	Dickinson	7	11.25
Keweenaw	n.a.	40.23	Allegan	5	29.37	Delta	22	11.19	Osceola	15	9.96
Roscommon	5	36.70	Osceola	85	29.28	Kalkaska	46	10.44	Tuscola	10	9.69
Lapeer	4	34.92	Newaygo	10	28.12	Charlevoix	-1	10.06	Oakland	22	9.05
Houghton	1	31.59	Delta	10	27.78	Alpena	7	9.65	Kent	15	9.05
Isabella	4	31.59	Manistee	10	27.49	Schoolcraft	12	9.37	Hillsdale	113	7.53
Baraga	4	31.06	Kalamazoo	12	25.05	Van Buren	3	9.30	Genesee	20	7.13
Lake	4	30.82	Calhoun	2	23.84	Mason	1	9.08	Bay	7	6.17
Oscoda	2	30.50	Ontonagon	12	22.56	Dickinson	0	9.07	Wayne	17	5.91
Five Least Dependent											
Genesee	7	8.10	Isabella	6	1.11	Osceola	1	2.18	Mecosta	-28	0.90
Macomb	2	7.66	Marquette	7	0.79	Eaton	5	2.18	Ontonagon	n.a.	0.83
Oakland	8	6.92	Alcona	-19	0.76	Allegan	2	2.17	Baraga	6	0.77
Midland	10	6.75	Roscommon	-48	0.72	Hillsdale	3	2.04	Alcona	3	0.65
Kent	6	6.67	Clinton	2	0.40	Ionia	-21	1.86	Schoolcraft	34	0.60
Michigan	5	11.54	Michigan	11	7.01	Michigan	5	5.63	Michigan	17	5.56
United States	6	10.98	United States	8	8.69	United States	7	7.54	United States	12	6.71

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.
a. Percentage change in labor and proprietors' earnings in this sector.
b. Earnings in this sector as a percentage of total labor and proprietors' earnings.
n.a. Not available.

Table 9. Michigan Counties Most and Least Dependent on Finance, Insurance, and Real Estate; Contract Construction; Federal Government; and Agriculture in Their Economic Base: 1984

Finance, Insurance & Real Estate			Contract Construction			Federal Government			Agriculture		
County	Growth 1983–84[a]	Dependency[b]	County	Growth 1983–84[a]	Dependency[b]	County	Growth 1983–84[a]	Dependency[b]	County	Growth 1983–84[a]	Dependency[b]
Ten Most Dependent											
Eaton	7	8.57	Montmorency	25	16.78	Iosco	5	46.55	Missaukee	127	20.13
Livingston	7	6.48	Mackinac	9	11.26	Marquette	6	19.22	Leelanau	13	16.67
Calhoun	3	5.94	Benzie	36	11.00	Chippewa	6	9.69	Oceana	-2	12.45
Houghton	9	5.68	Iron	29	10.04	Calhoun	10	9.69	Sanilac	198	12.03
Gladwin	11	5.57	Alcona	14	9.45	Dickinson	3	8.48	Cass	56	11.89
Oakland	8	5.51	Midland	-39	9.16	Houghton	1	5.17	Clinton	48	11.23
Missaukee	1	5.14	Leelanau	9	8.89	Leelanau	3	5.08	Huron	183	11.10
Montmorency	-11	5.13	Cheboygan	14	8.37	Macomb	2	5.02	Barry	82	10.57
Arenac	16	5.11	Dickinson	11	8.07	Cheboygan	6	4.65	Hillsdale	70	9.93
Wayne	7	5.05	Kalkaska	-13	7.58	Gogebic	1	4.55	Arenac	174	8.81
Five Least Dependent											
Kalkaska	-5	1.25	Ionia	13	1.85	Ottawa	8	0.87	Genesee	164	0.16
Allegan	7	1.24	Cass	23	1.76	Luce	3	0.86	Oakland	17	0.10
Luce	5	1.21	Presque Isle	-1	1.76	St. Joseph	4	0.83	Wayne	-4	0.03
Leelanau	4	1.20	Wexford	15	1.60	Oakland	8	0.76	Crawford	0	0.00
Alcona	2	0.44	Luce	9	1.27	Midland	10	0.60	Keweenaw	0	0.00
Michigan	7	4.03	Michigan	8	3.12	Michigan	5	2.19	Michigan	51	0.96
United States	12	6.45	United States	14	5.42	United States	6	5.40	United States	68	1.83

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.
a. Percentage change in labor and proprietors' earnings in this sector.
b. Earnings in this sector as a percentage of total labor and proprietors' earnings.

above average rate of 13 percent. Saginaw County, second of those counties dominated by heavy industry, was a below-average county in overall gowth of earnings, even though heavy industry performed above average. Industries other than manufacturing were extremely sluggish in Saginaw. Macomb County, fourth in durable-goods manufacturing importance had above-average growth in this as well as other economic sectors. Consequently, its overall growth was exceptional, as was similar growth in Cass, Ottawa, and Ionia counties. Wayne County, tenth in rank according to proportion of earnings derived from heavy industry, experienced below-average growth in this sector coupled with sluggish growth in other sectors which placed it fiftieth among Michigan counties in growth overall.

Generally speaking, counties where manufacturing of durables made the most rapid gains between 1983 and 1984 are located in the northern Lower Peninsula. Among southern counties, Allegan led in this category, followed by Oakland.

In services, the state's most important group of industries after manufacturing, growth was relatively slow between 1983 and 1984 (see Table 4). Consequently, counties like Emmet, Crawford, Leelanau, Gogebic, Keweenaw, Arenac, Otsego, and Clare had an uphill battle in the growth contest. These are counties that are dominated by tourism. Oakland County, also heavily dependent in services, has a service sector that is dominated by business and professional services, as well as having a growing travel industry that is—unlike northern Michigan—more oriented to business travel than to tourism (services dependence is shown in Table 5). A heavy dependence on tourism also is reflected in the extraordinary weight given to retail trade in Crawford, Clare, Roscommon, Ogemaw, Missaukee, and several other northern Michigan counties (see Tables 6 and 7). Retailing earnings have seen slow growth in Michigan; only nineteen counties exceeded the national growth figure of 10 percent. Macomb and Oakland were among the fast growers, but Wayne, the state's most populous, was in the bottom forty.

Tables 8 and 9 summarize locations around the state where other industries are most and least important. State and local government tends to be relatively more important in northern counties that are sparsely populated and where there is generally a scarcity of better-paying jobs in industry. Federal government is vital in a few northern counties where there are military or veterans' installations and in Macomb County, headquarters of the Tank Automotive Command of Michigan.

The Dow Chemical Corporation makes Midland Michigan's area most dominated by nondurable-goods production. Several smaller Michigan counties are heavily dependent on the transportation, communication, and utility sector because of concentrations of electric generating facilities.

Missaukee's dairy herds make it the county most dependent on agriculture. Leelanau raises tart cherries and Oceana, asparagus. Growing navy beans and dairying are vital to the economies of Sanilac and Huron counties.

Oakland County stands out because of its appearance among the top ten services, wholesale trade, and finance, insurance, and real estate and among the bottom five in federal as well as state and local government.

Table 10. Earnings Residence Adjustment of Michigan Counties: 1984

(Dollar figures in thousands)

County	Labor and proprietors' earnings, by county in which earned	Residence adjustment	Labor and proprietor' earnings, by county in which earned	Proportion[a]
Bottom Ten				
Eaton	249,554	607,289	856,843	0.7088
Livingston	353,452	671,691	1,025,143	0.6552
Clinton	173,340	317,413	490,753	0.6468
Leelanau	35,351	56,394	91,745	0.6147
Lapeer	266,070	315,155	581,225	0.5422
Keweenaw	3,059	3,517	6,576	0.5348
Barry	158,355	171,965	330,320	0.5206
Shiawassee	279,459	279,256	558,715	0.4998
Monroe	591,229	564,626	1,155,855	0.4885
Cass	205,834	180,923	386,757	0.4678
Top Ten				
Otsego	101,443	-12,024	89,419	-0.1185
Kent	4,640,512	-623,870	4,016,642	-0.1344
Saginaw	1,967,616	-298,912	1,668,704	-0.1519
Grand Traverse	521,810	-81,718	440,092	-0.1566
Washtenaw	3,378,725	-574,636	2,804,089	-0.1701
Wexford	168,654	-29,654	139,000	-0.1758
Ontonagon	40,680	-8,301	32,379	-0.2041
Wayne	22,960,729	-5,061,705	17,899,024	-0.2205
Luce	45,898	-12,400	33,498	-0.2702
Ingham	3,591,023	-1,260,293	2,330,730	-0.3510
Michigan	77,744,658	709,646	78,454,304	0.0090
United States	2,026,114,000	-510,000	2,025,604,000	-0.0003

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

a. Residence adjustment as a percentage of labor and proprietors' earnings received (where positive) or generated (where negative).

RESIDENCE ADJUSTMENT

The numbers in Tables 1 through 9 focus on the economic activity taking place within counties, regardless of where the workers responsible for that activity live. To calculate income received by persons within a county, the BEA has developed residence adjustments. For example, in 1981 residents of other counties earned $1.3 billion more in Ingham than Ingham residents earned elsewhere (see Table 10). That figure constitutes more than a third of total earnings generated in the county. Other counties exporting a large percentage of earnings or, correlatively, importing a large percentage of labor are Luce, Wayne, and Ontonagon. Although Wayne ranks third in the proportion of earnings going to outside residents, it has by far the largest sheer dollar volume—over $5 billion.

In dollar volume of earnings imported or labor exported, Oakland is first with just under $2 billion and Macomb second with $1.9 billion. In percentage ranking they are 37 and 26 respectively. These figures merely illustrate what is common knowledge—the dependence of Oakland and Macomb residents on Wayne County jobs is not inconsequential. In a relative sense, the greatest such dependence in this state is Eaton's reliance on Ingham.

PROPERTY INCOME AND TRANSFER PAYMENTS

Total personal income is the sum of earnings received and income that entails no labor in return. The latter has two components: property income and transfer payments. Property income is received as dividends, interest, and rent by

Table 11. Counties Most and Least Dependent on Property Income in Total Personal Income: 1984

County	Percentage	Per capita
Top Ten		
Roscommon	31.3	2,840
Leelanau	29.7	3,440
Montmorency	29.3	2,470
Alcona	28.1	2,420
Oscoda	27.9	2,030
Antrim	27.5	2,590
Huron	27.5	3,090
Benzie	26.7	2,550
Crawford	26.6	2,200
Emmet	26.4	2,830
Bottom Five		
Livingston	14.7	1,950
Wayne	14.6	1,800
Shiawassee	14.5	1,680
Lapeer	13.8	1,590
Genesee	13.4	1,770
Michigan	16.6	2,100
United States	19.0	2,430

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

owners of capital. Transfer payments include Social Security and other pensions, welfare benefits, unemployment compensation, and other income not linked to current production or to capital ownership. Except for Huron, the ten highest ranked Michigan counties in percentage of personal income derived from property ownership are all located in the northern Lower Peninsula (see Table 11). It is to these counties that many workers retire when they leave Genesee, Wayne and other industrial centers.

During 1984, Social Security (federal, old age, survivors, and disability insurance) payments in Michigan accounted for 43 percent of total transfer payments; Medicare, 17 percent; welfare, 15 percent; military retirement and veterans' benefits, 4 percent; unemployment benefits, 5 percent; and other items, 16 percent. Keweenaw County is more heavily dependent on transfer payments than any other Michigan county (see Table 12). It ranks first in Social Security benefits as a percentage of personal income (22 percent). The rankings in Table 6 primarily reflect Social Security benefits, because they are the major component of transfer payments. Northern Michigan counties rank high in this table for the same reason that they are located at the top of the list in Table 11: large retirement communities.

PERSONAL INCOME

The sum of earnings received, property income, and transfer payments is a broad yardstick of the income available to individuals. Per capita personal income indicates how counties fare on the average in the acquisition of slices of national "pie." Oakland County does exceptionally well in this regard because it has high-paying employers and because well-paid workers with jobs elsewhere reside there (see Table 13). Michigan's counties with heavy dependence on manufacturing also rank high in per capita income because the majority of those jobs are high paying.

Most northern Michigan counties in the Lower Peninsula have low per capita incomes because a high proportion of their residents are retirees living on accumulated wealth and pensions. This is especially true in Roscommon, Montmorency, Alcona, and Oscoda. Also, the retail and service industries that cater to retirees and to summer visitors offer low-paying jobs for the most part. The area provides summer employment for high school and college students as well as for older workers who live there. Small business comprises an exceptional proportion of earnings in Montmorency, Lake, Oscoda, and Alcona counties.

Table 12. Counties Most and Least Dependent on Transfer Payments in Total Personal Income: 1984

County	Percentage	Per capita
Top Ten		
Keweenaw	39.6	3,180
Lake	39.0	2,780
Montmorency	37.9	3,190
Alcona	35.3	3,040
Roscommon	35.2	3,200
Ontonagon	33.4	2,430
Gogebic	31.5	2,800
Clare	31.0	2,550
Ogemaw	30.8	2,380
Luce	30.3	3,100
Bottom Five		
Midland	10.3	1,360
Clinton	10.3	1,220
Eaton	9.8	1,250
Oakland	9.2	1,640
Livingston	8.7	1,150
Michigan	14.9	1,880
United States	13.8	1,760

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

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Table 13. Percentage Change in Per Capita Personal Income, 1974–84 and 1983–84, and Ranking of Michigan Counties According to Per Capita Personal Income: 1984

County	Per capita personal income	Percent change 1974–84	Percent change 1983–84	County	Per capita personal income	Percent change 1974–84	Percent change 1983–84
Oakland	17,837	144.4	11.3	Charlevoix	9,810	126.0	8.0
Washtenaw	14,670	167.5	11.0	Alpena	9,775	121.1	8.4
Macomb	14,498	133.0	11.2	Manistee	9,772	143.0	7.6
Livingston	13,291	162.3	10.9	Van Buren	9,700	110.9	7.0
Midland	13,269	127.6	8.4	Marquette	9,645	119.4	8.1
Genesee	13,181	142.7	11.1	Montcalm	9,607	109.6	7.7
Kalamazoo	12,817	129.2	7.6	Mackinac	9,583	144.3	6.6
Eaton	12,742	158.0	6.8	Benzie	9,504	127.2	10.9
Kent	12,448	123.8	9.9	Antrim	9,421	130.3	11.0
Wayne	12,303	98.0	10.2	Delta	9,352	118.9	6.5
Ingham	12,277	128.5	6.9	Mason	9,142	115.1	10.3
Monroe	12,226	133.5	9.1	Roscommon	9,056	145.0	7.0
Ottawa	12,208	135.7	9.9	Newaygo	9,054	130.9	10.7
Grand Traverse	12,201	145.1	12.2	Wexford	9,008	117.8	9.6
St. Clair	12,120	147.0	10.1	Kalkaska	8,971	116.5	9.4
Clinton	11,885	142.6	7.6	Iosco	8,927	108.1	6.0
Calhoun	11,729	114.4	6.5	Schoolcraft	8,921	135.3	5.4
Shiawassee	11,613	128.3	11.1	Gogebic	8,867	110.8	4.1
Leelanau	11,601	134.5	11.5	Isabella	8,849	134.5	7.3
Lapeer	11,516	146.8	9.4	Arenac	8,755	112.9	9.7
Saginaw	11,495	112.4	8.1	Alger	8,750	145.5	9.7
Cass	11,476	138.7	13.4	Presque Isle	8,694	133.8	10.9
Dickinson	11,381	124.9	5.8	Oceana	8,662	113.0	8.8
Lenawee	11,369	123.2	9.0	Alcona	8,646	158.2	9.3
Bay	11,271	122.0	8.2	Cheboygan	8,558	120.1	6.7
Huron	11,235	108.6	17.1	Montmorency	8,457	140.3	7.0
Jackson	11,166	106.9	7.4	Baraga	8,302	110.4	7.7
Berrien	11,149	105.8	8.5	Crawford	8,242	141.3	9.5
St. Joseph	10,745	123.4	9.4	Clare	8,228	124.6	7.9
Emmet	10,719	129.8	6.7	Gladwin	8,227	123.4	8.3
Allegan	10,519	140.9	11.1	Houghton	8,225	133.1	5.2
Muskegon	10,498	116.0	9.6	Chippewa	8,216	120.3	7.4
Gratiot	10,428	95.8	9.5	Keweenaw	8,137	105.9	5.4
Branch	10,389	133.2	6.1	Osceola	8,087	107.6	9.9
Barry	10,347	135.6	10.5	Missaukee	7,813	116.2	12.4
Tuscola	10,316	100.5	10.5	Ogemaw	7,709	117.2	8.1
Hillsdale	10,296	120.7	12.2	Ontonagon	7,309	80.0	2.8
Luce	10,276	150.2	6.3	Oscoda	7,272	126.0	9.4
Sanilac	10,071	117.3	13.1	Mecosta	7,254	139.5	8.5
Otsego	10,070	148.3	10.5	Lake	7,109	109.2	9.0
Iron	9,999	143.5	6.2				
Menominee	9,948	139.8	11.7	Michigan	12,621	122.2	9.9
Ionia	9,921	137.1	8.7	United States	12,772	134.4	9.3

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.